HDR-FX1000/FX1000E

RMT-831

SERVICE MANUAL

LEVEL 2

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Tourist Model
Japanese Model

Ver. 1.2 2009.03
Revision History

Revised-1

Replace the previously issued SERVICE MANUAL 9-852-622-32 with this Manual.

Photo: HDR-FX1000

N MECHANISM (MDX-N220)

Link

SPECIFICATIONS	DISASSEMBLY	SCHEMATIC DIAGRAMS
MODEL INFORMATION TABLE	BLOCK DIAGRAMS	PRINTED WIRING BOARDS
SERVICE NOTE	FRAME SCHEMATIC DIAGRAM	REPAIR PARTS LIST

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Mini DV Digital Video Cassette **DIGITAL HD VIDEO CAMERA RECORDER**

SONY®

HDR-FX1000/FX1000E_L2
9-852-622-33

Sony EMCS Co.

2009C0800-1
© 2009.03
Published by Kohda TEC

These specifications are extracted from instruction manual of HDR-FX1000E.

ENGLISH | JAPANESE

SPECIFICATIONS

System

Video recording system (HDV)
2 rotary heads, Helical scanning system
Video recording system (DV)
2 rotary heads, Helical scanning system
Still image recording system
Exif Ver. 2.2*
Audio recording system (HDV)
Rotary heads, MPEG-1 Audio Layer -2,
Quantization: 16 bits
Fs48kHz (stereo)
transfer rate: 384 kbps
Audio recording system (DV)
Rotary heads, PCM system
Quantization: 12 bits
Fs32kHz (stereo1, stereo2)
Quantization: 16 bits
Fs48kHz (stereo)
Video signal
PAL color, CCIR standards
1080/50i specification
Usable cassette
Mini DV cassette with the mini DV mark printed
Tape speed (HDV)
Approx. 18.831 mm/s
Tape speed (DV)
SP: Approx. 18.831 mm/s
LP: Approx. 12.568 mm/s
Recording/playback time (HDV)
60 min (using a DVM60 cassette)
Recording/playback time (DV)
SP: 60 min (using a DVM60 cassette)
LP: 90 min (using a DVM60 cassette)
Fast forward/rewind time
Approx. 2 min 40 s (using a DVM60 cassette and rechargeable battery pack)
Approx. 1 min 45 s (using a DVM60 cassette and AC Adaptor)
Viewfinder
Electric viewfinder (color)
Image device
6.0 mm (1/3 type) 3CMOS sensor
Recording Pixels (HDV/DV16:9 still recording):
Max. 1.20 Mega (1 440 × 810) pixels**
Gross: Approx. 1 120 000 pixels
Effective (movie, 16:9):
1 037 000 pixels
Effective (movie, 4:3):
778 000 pixels
Effective (still, 16:9):
1 037 000 pixels
Effective (still, 4:3):
778 000 pixels
Lens
G Lens
20 × (Optical), Approx. 30 × (Digital, when [D.EXTENDER] is set to [ON])
Focal length
f= 4.1 - 82.0 mm (3/16 - 3 1/4 in.)
When converted to a 35 mm still camera
29.5 - 590 mm (1 3/16 - 23 1/4 in.) (16:9),
36.1 - 722 mm (1 7/16 - 28 1/2 in.) (4:3)
F1.6 - 3.4
Filter diameter: 72 mm (2 7/8 in.)
Color temperature
Automatically
(one push) A/B
[INDOOR] (3 200K)
[OUTDOOR] (5 800K)
Minimum illumination
1.5 lx (lux) (Fixed Shutter Speed 1/25, auto gain, auto iris) (F 1.6)

* " Exif " is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association). Files in this format can have additional information such as your camcorder fs setting information at the time of recording.

**The unique pixel array of Sony's ClearVid CMOS sensor and image processing system (new Enhanced Imaging Processor) allows for still image resolution equivalent to the sizes described.

Output connectors

A/V Remote Connector
10-pin connector
When A/V connecting cable is connected
Video signal: 1 Vp-p, 75 Ω (ohms)
Luminance signal: 1 Vp-p, 75 Ω (ohms)
Chrominance signal: 0.3 Vp-p (burst signal), 75 Ω (ohms)
When component A/V cable is connected
Y: 1 Vp-p, 75 Ω (ohms), PB/PR, CB/CR: +/- 350 mV, 75 Ω (ohms)
Audio signal: 327 mV (at load impedance 47 k Ω (kilohms)), Output impedance with less than 2.2 k Ω (kilohms)
HDMI OUT jack
TypeA (19-pin)
(headphones) jack
Stereo-minijack (∅ 3.5 mm)

Input/Output connectors

LANC jack
Stereo mini-minijack (∅ 2.5 mm)
HDV/DV jack
i.LINK interface (IEEE 1394, 4-pin connector S100)
MIC jack
Stereo-minijack (∅ 3.5 mm)

LCD screen

Picture
8.0 cm (3.2 type, aspect ratio 16:9)
Total dot number
921 600 (1 920 × 480)

General

Power requirements
DC 7.2 V (battery pack)
DC 8.4 V (AC Adaptor)
Average power consumption
During camera recording using the viewfinder with normal brightness:
HDV recording 6.2 W
DV recording 6.0 W
During camera recording using the LCD with normal brightness:
HDV recording 6.4 W
DV recording 6.2 W
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Storage temperature
-20 °C to + 60 °C (-4 °F to + 140 °F)
Dimensions (approx.)
169 × 178 × 349 mm
(6 3/4 × 7 × 13 7/8 in.) (w/h/d)
including the projecting parts except for the grip belt
169 × 178 × 349 mm
(6 3/4 × 7 × 13 7/8 in.) (w/h/d)
including the projecting parts with the battery pack (NP-F570)
Mass (approx.)
2.1 kg (4 lb 9 oz) including the lens hood with lens cover
2.3 kg (4 lb 15 oz) including the lens hood with lens cover, battery pack (NP-F570), cassette (DVM60) and large eyecup

AC Adaptor AC-L100

Power requirements
AC 100 V - 240 V, 50 Hz/60 Hz
Current consumption
0.35 A - 0.18 A
Power consumption
18 W
Output voltage
DC 8.4 V*
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Storage temperature
-20 °C to +60 °C (-4 °F to +140 °F)
Dimensions (approx.)
48 × 29 × 81 mm
(1 15/16 × 1 3/16 × 3 1/4 in.) (w/h/d)
excluding the projecting parts
Mass (approx.)
170 g (6.0 oz) excluding the power cord (mains lead)

* See the label on the AC Adaptor for other specifications.

Rechargeable battery pack NP-F570

Maximum output voltage
DC 8.4 V
Output voltage
DC 7.2 V
Capacity
15.8 Wh (2 200 mAh)
Dimensions (approx.)
38.4 × 20.6 × 70.8 mm
(1 9/16 × 13/16 × 2 7/8 in.) (w/h/d)
Mass (approx.)
100 g (3.5 oz)
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Type
Lithium ion

Design and specifications are subject to change without notice.

These specifications are extracted from instruction manual of HDR-FX1000.

ENGLISH | JAPANESE

SPECIFICATIONS

System

Video recording system (HDV)
2 rotary heads, Helical scanning system
Video recording system (DV)
2 rotary heads, Helical scanning system
Still image recording system
Exif Ver. 2.2*
Audio recording system (HDV)
Rotary heads, MPEG-1 Audio Layer -2,
Quantization: 16 bits
Fs48kHz (stereo)
transfer rate: 384 kbps
Audio recording system (DV)
Rotary heads, PCM system
Quantization: 12 bits
Fs32kHz (stereo1, stereo2)
Quantization: 16 bits
Fs48kHz (stereo)
Video signal
NTSC color, EIA standards
1080/60i specification
Usable cassette
Mini DV cassette with the Mini DV mark printed
Tape speed (HDV)
Approx. 18.812 mm/s
Tape speed (DV)
SP: Approx. 18.812 mm/s
LP: Approx. 12.555 mm/s
Recording/playback time (HDV)
60 min (using a DVM60 cassette)
Recording/playback time (DV)
SP: 60 min (using a DVM60 cassette)
LP: 90 min (using a DVM60 cassette)
Fast forward/rewind time
Approx. 2 min 40 s (using a DVM60 cassette and rechargeable battery pack)
Approx. 1 min 45 s (using a DVM60 cassette and AC Adaptor)
Viewfinder
Electric viewfinder (color)
Image device
6.0 mm (1/3 type) 3CMOS sensor
Recording Pixels (HDV/DV16:9 still recording):
Max. 1.20 Mega (1 440 × 810) pixels**
Gross: Approx. 1 120 000 pixels
Effective (movie, 16:9):
1 037 000 pixels
Effective (movie, 4:3):
778 000 pixels
Effective (still, 16:9):
1 037 000 pixels
Effective (still, 4:3):
778 000 pixels
Lens
G Lens
20 × (Optical), Approx. 30 × (Digital, when [D.EXTENDER] is set to [ON])
Focal length
f= 4.1 - 82.0 mm (3/16 - 3 1/4 in.)
When converted to a 35 mm still camera
29.5 - 590 mm (1 3/16 - 23 1/4 in.) (16:9),
36.1 - 722 mm (1 7/16 - 28 1/2 in.) (4:3)
F1.6 - 3.4
Filter diameter: 72 mm (2 7/8 in.)
Color temperature
Automatically
(one push) A/B
[INDOOR] (3 200K)
[OUTDOOR] (5 800K)
Minimum illumination
1.5 lx (lux) (Fixed Shutter Speed 1/30, auto gain, auto iris) (F 1.6)

* " Exif " is a file format for still images, established by the JEITA (Japan Electronics and Information Technology Industries Association). Files in this format can have additional information such as your camcorder fs setting information at the time of recording.

**The unique pixel array of Sony's ClearVid CMOS sensor and image processing system (new Enhanced Imaging Processor) allows for still image resolution equivalent to the sizes described.

Output connectors

A/V Remote Connector
10-pin connector
When A/V connecting cable is connected
Video signal: 1 Vp-p, 75 Ω (ohms)
Luminance signal: 1 Vp-p, 75 Ω (ohms)
Chrominance signal: 0.286 Vp-p (burst signal), 75 Ω (ohms)
When component A/V cable is connected
Y: 1 Vp-p, 75 Ω (ohms), PB/PR, CB/CR: +/- 350 mV, 75 Ω (ohms)
Audio signal: 327 mV (at load impedance 47 k Ω (kilohms)), Output impedance with less than 2.2 k Ω (kilohms)
HDMI OUT jack
TypeA (19-pin)
(headphones) jack
Stereo-minijack (∅ 3.5 mm)

Input/Output connectors

LANC jack
Stereo mini-minijack (∅ 2.5 mm)
HDV/DV jack
i.LINK interface (IEEE 1394, 4-pin connector S100)
MIC jack
Stereo-minijack (∅ 3.5 mm)

LCD screen

Picture
8.0 cm (3.2 type, aspect ratio 16:9)
Total dot number
921 600 (1 920 × 480)

General

Power requirements
DC 7.2 V (battery pack)
DC 8.4 V (AC Adaptor)
Average power consumption
During camera recording using the viewfinder with normal brightness:
HDV recording 6.4 W
DV recording 6.1 W
During camera recording using the LCD with normal brightness:
HDV recording 6.6 W
DV recording 6.3 W
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Storage temperature
-20 °C to + 60 °C (-4 °F to + 140 °F)
Dimensions (approx.)
169 × 178 × 349 mm
(6 3/4 × 7 × 13 7/8 in.) (w/h/d)
including the projecting parts except for the grip belt
169 × 178 × 349 mm
(6 3/4 × 7 × 13 7/8 in.) (w/h/d)
including the projecting parts with the battery pack (NP-F570)
Mass (approx.)
2.1 kg (4 lb 9 oz) including the lens hood with lens cover
2.3 kg (4 lb 15 oz) including the lens hood with lens cover, battery pack (NP-F570), cassette (DVM60) and large eyecup

AC Adaptor AC-L100

Power requirements
AC 100 V - 240 V, 50 Hz/60 Hz
Current consumption
0.35 A - 0.18 A
Power consumption
18 W
Output voltage
DC 8.4 V*
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Storage temperature
-20 °C to +60 °C (-4 °F to +140 °F)
Dimensions (approx.)
48 × 29 × 81 mm
(1 15/16 × 1 3/16 × 3 1/4 in.) (w/h/d)
excluding the projecting parts
Mass (approx.)
170 g (6.0 oz) excluding the power cord (mains lead)

* See the label on the AC Adaptor for other specifications.

Rechargeable battery pack NP-F570

Maximum output voltage
DC 8.4 V
Output voltage
DC 7.2 V
Capacity
15.8 Wh (2 200 mAh)
Dimensions (approx.)
38.4 × 20.6 × 70.8 mm
(1 9/16 × 13/16 × 2 7/8 in.) (w/h/d)
Mass (approx.)
100 g (3.5 oz)
Operating temperature
0 °C to 40 °C (32 °F to 104 °F)
Type
Lithium ion

Design and specifications are subject to change without notice.

自己診断搭載機種 HDV HDV 1080i InfoLITHIUM MEMORY STICK HDMI Mini DV Digital Video Cassette

概略仕様

システム

録画方式(HDV)	回転2ヘッドヘリカルスキャン
録画方式(DV)	回転2ヘッドヘリカルスキャン
静止画記録方式	Exif Ver.2.2*
録音方式(HDV)	回転ヘッド MPEG-1 Audio Layer2 16ビット Fs48kHz(ステレオ) 転送レート384kbps
録音方式(DV)	回転ヘッド、PCMシステム 12ビット Fs32kHz (ステレオ1、ステレオ2) 16ビット Fs48kHz(ステレオ)
映像信号	NTSCカラー、EIA標準方式 1080/60i方式
使用可能カセット	Mini DV マークのついたカセット
テープ速度(HDV)	約8.812mm/秒
テープ速度(DV)	SP：約18.812mm/秒 LP：約12.555mm/秒
録画/再生時間(HDV)	60分(DVM60使用時)
録画/再生時間(DV)	SP：60分(DVM60使用時) LP：90分(DVM60使用時)
早送り、巻き戻し時間	バッテリー使用時： 約2分40秒(DVM60使用時) ACアダプター/チャージャー使用時： 約2分45秒(DVM60使用時)
ファインダー	電子ファインダー：カラー
撮像素子	6.0mm(1/3型)3CMOSセンサー 総画素数：約12万画素 静止画記録画素数：最大20万画素相当**(440×810)(HDV/DV 16：9記録時) 動画時有効画素数(16：9モード)：約204万画素 動画時有効画素数(4：3モード)：約158万画素 静止画時有効画素数(16：9モード)：約204万画素 静止画時有効画素数(4：3モード)：約158万画素
ズームレンズ	Gレンズ 20倍(光学)、約30倍(デジタル、デジタルエクステンダー［入］時) f=4.1～82.0mm 35mmカメラ換算 29.5～590mm(16:9モード) (4:3モードでは36.1～722mm) F1.6～3.4 フィルター径2mm
色温度切り換え	オート ワンプッシュ(A、B) [屋内](約3200K) [屋外](約5800K)
最低被写体照度	1.5lx(ルクス)(シャッタースピード固定(1/30)、オートゲインコントロール、アイリスオート) (F1.6)

*(社)電子情報技術産業協会(JEITA)にて制定された、撮影情報などの付帯情報を追加することができる静止画用のファイルフォーマット。

**ソニー独自のクリアビッドCMOSセンサーの画素配列と画像処理システム新エンハンスドイメージングプロセッサーにより、静止画は表記の記録サイズを実現しています。

出力端子

A/Vリモート端子	10ピン特殊コネクター A/V接続ケーブル挿入時 映像：1 Vp-p、75Ω Y出力 1Vp-p、75Ω C出力 0.286Vp-p(バースト)、75Ω D端子A/VケーブルまたはコンポーネントA/Vケーブル挿入時 Y：1Vp-p、75Ω PB/PR. CB/CR：±350mV、75Ω 音声：327mV(47kΩ負荷時)、出力インピーダンス2.2 kΩ以下
HDMI OUT端子	タイプA(19ピン)
(ヘッドホン)端子	ステレオミニジャック(φ3.5mm)

入/出力端子

LANC 端子	ステレオミニミニジャック(2.5φmm)
HDV/DV端子	i.LINK(IEEE1394 4ピンコネクター S100)
外部マイク入力端子	ステレオミニジャック(φ3.5mm)

液晶画面

画面サイズ	8.0cm(3.2型、アスペクト比16:9)
総ドット数	921 600ドット 横 920×縦480

電源部、その他

電源電圧	バッテリー端子入力7.2V DC端子入力8.4V
消費電力	ファインダー使用時、明るさ標準： HDV記録時6.4W DV記録時6.1W 液晶画面使用時、明るさ標準： HDV記録時6.6W DV記録時6.3W
動作温度	0℃～40℃
保存温度	−20℃～+60℃
外形寸法	169×178×349mm (突起部含む、グリップベルト含まず) (幅×高さ×奥行き)
本体質量	約2.1kg(レンズフード含む)
撮影時総質量	約2.4kg(バッテリー：NP-F770、DVM60テープ、レンズカバー付きフード、大型アイカップ含む)

本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

Model information table

Model	HDR-FX1000	HDR-FX1000E
Destination	US, CND, E, KR, JE, J	AEP, UK, E, HK, AUS, CH, JE
Color system	NTSC	PAL

- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  JE : Tourist model
  KR : Korea model

CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
   - Keep the temperature of the soldering iron around 270˚C during repairing.
   - Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
   - Be careful not to apply force on the conductor when soldering or unsoldering.

Unleaded solder

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。

サービス，点検時には次のことにご注意下さい。

1. **注意事項をお守りください。**
   サービスのとき特に注意を要する個所については，キャビネット，シャーシ，部品などにラベルや捺印で注意事項を表示しています。これらの注意書き及び取扱説明書等の注意事項を必ずお守り下さい。
2. **指定部品のご使用を**
   セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は，使用されていたものと同じ特性の部品を使用して下さい。特に回路図，部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用下さい。
3. **部品の取付けや配線の引きまわしはもとどおりに**
   安全上，チューブやテープなどの絶縁材料を使用したり，プリント基板から浮かして取付けた部品があります。また内部配線は引きまわしやクランパによって発熱部品や高圧部品に接近しないよう配慮されていますので，これらは必ずもとどおりにして下さい。
4. **サービス後は安全点検を**
   サービスのために取外したネジ，部品，配線がもとどおりになっているか，またサービスした個所の周辺を劣化させてしまったところがないかなどを点検し，安全性が確保されていることを確認して下さい。
5. **チップ部品交換時の注意**
   - 取外した部品は再使用しないで下さい。
   - タンタルコンデンサのマイナス側は熱に弱いため交換時は注意して下さい。
6. **フレキシブルプリント基板の取扱いについて**
   - コテ先温度を270℃前後にして行なって下さい。
   - 同一パターンに何度もコテ先を当てないで下さい。（３回以内）
   - パターンに力が加わらないよう注意して下さい。
7. **無鉛半田について**
   無鉛半田を使用している基板には，無鉛（Lead Free）を意味するレッドフリーマークがプリントされています。
   （注意：基板サイズによっては，無鉛半田を使用していてもレッドフリーマークがプリントされていないものがあります）
   ：レッドフリーマーク
   無鉛半田には，以下の特性があります。
   - 融点が従来の半田よりも約40℃高い。
     従来の半田こてをそのまま使用することは可能ですが，少し長めにこてを当てる必要があります。
     温度調節機能のついた半田こてを使用する場合，約350℃に設定して下さい。
     注意：半田こてを長く当てすぎると，基板のパターン（銅箔）がはがれてしまうことがありますので，注意して下さい。
   - 粘性が強い
     従来の半田よりも粘性が強いため，IC端子などが半田ブリッジしないように注意して下さい。
   - 従来の半田と混ぜて使用可能
     無鉛半田には無鉛半田を追加するのが最適ですが，従来の半田を追加しても構いません。

1. SERVICE NOTE

ENGLISH | JAPANESE

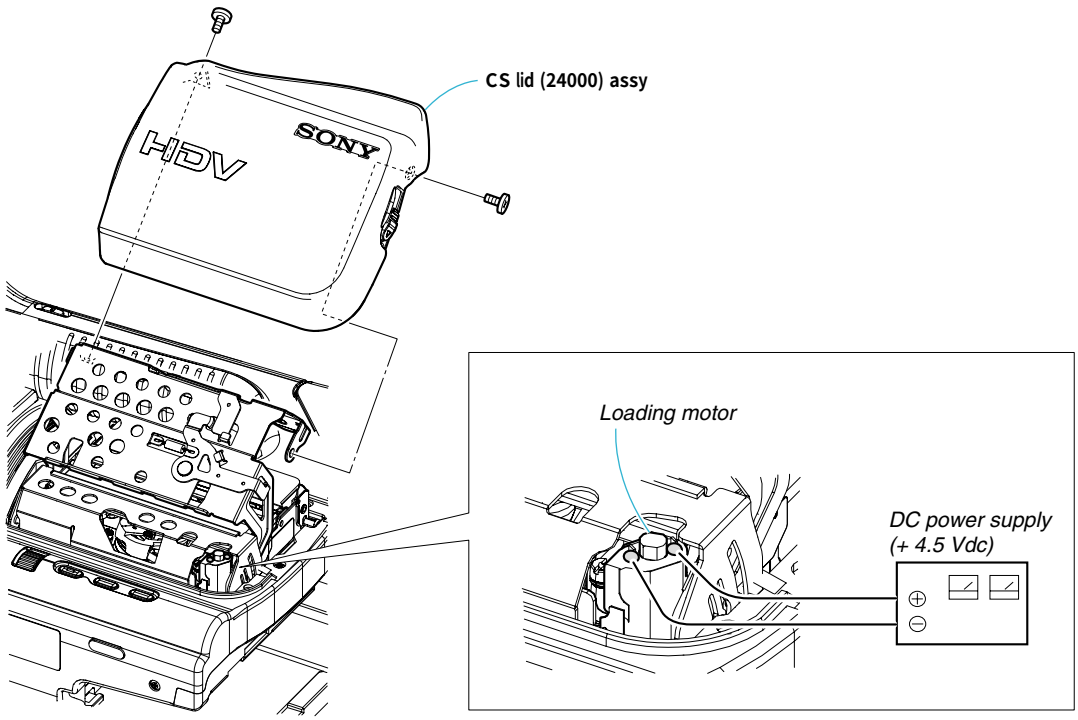
1-1. POWER SUPPLY DURING REPAIRS

In this unit, about 10 seconds after power is supplied to the battery terminal using the regulated power supply (8.4V), the power is shut off so that the unit cannot operate.
These following method is available to prevent this.

Method:
Use the AC adaptor (AC-L100).

1-2. TO TAKE OUT A CASSETTE WHEN NOT EJECT (FORCE EJECT)

① Remove the Power supply.
② Remove two screws and the CS lid (24000) assy.
③ Supply +4.5V from the DC power supply to the loading motor and unload.



1-3. SETTING THE "FORCED POWER ON" MODE

It is possible to turn on power by adjustment remote commander (RM-95 or NEW LANC JIG).
Operate the VTR function using the adjustment remote commander.

1-3-1. Setting the "Forced Camera Power ON" Mode

1) Select page: 0, address: 01, and set data: 01.
2) Select page: A, address: 10, set data: 01 and press the "PAUSE (Write) " button of the adjustment remote commander.

1-3-2. Setting the "Forced VTR Power ON" Mode

1) Select page: 0, address: 01, and set data: 01.
2) Select page: A, address: 10, set data: 02 and press the "PAUSE (Write) " button of the adjustment remote commander.

1-3-3. Exiting the "Forced Power ON" Mode

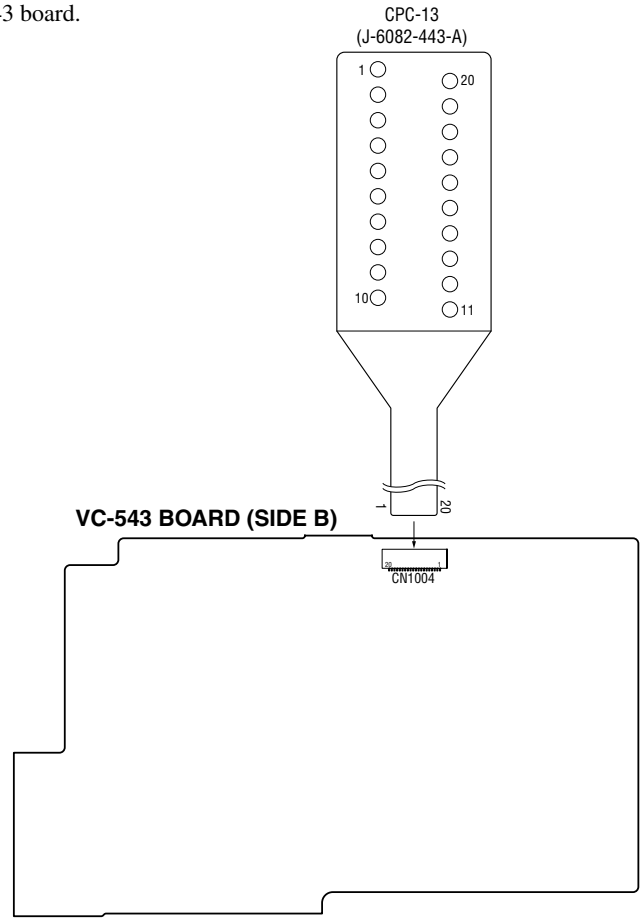
1) Select page: 0, address: 01, and set data: 01.
2) Select page: A, address: 10, set data: 00 and press the "PAUSE (Write) " button of the adjustment remote commander.
3) Select page: 0, address: 01, and set data: 00.

1-4. USING SERVICE JIG

Connect the CPC-13 jig (J-6082-443-A) to the CN1004 on the VC-543 board.

Pin No.	Signal Name	Pin No.	Signal Name
1 (20)	REG_GND	11 (10)	EEP_SO_C
2 (19)	RF_MON	12 (9)	EEP_SO_S
3 (18)	REG_GND	13 (8)	EEP_SCK_C
4 (17)	SWP	14 (7)	EEP_SCK_S
5 (16)	FRRV	15 (6)	D_2.8V
6 (15)	REG_GND	16 (5)	MD2_C
7 (14)	GND	17 (4)	MD2
8 (13)	GND	18 (3)	XCS_MC_FLASH_C
9 (12)	EEP_SI_C	19 (2)	XCS_MC_FLASH
10 (11)	EEP_SI_S	20 (1)	XSYS_RST

Note: The pin number in ( ) is test terminal number of CN1004 on the VC-543 board.



1-5. SELF-DIAGNOSIS FUNCTION

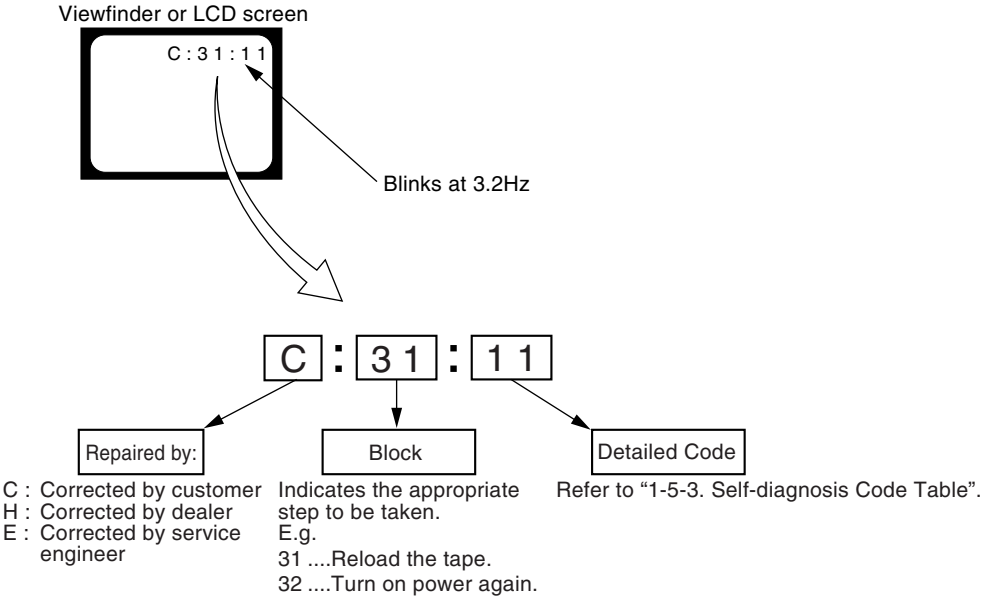
1-5-1. Self-diagnosis Function

When problems occur while the unit is operating, the self-diagnosis function starts working, and displays on the viewfinder or LCD screen what to do.

Details of the self-diagnosis functions are provided in the Instruction manual.

1-5-2. Self-diagnosis Display

When problems occur while the unit is operating, the counter of the viewfinder or LCD screen shows a 4-digit display consisting of an alphabet and numbers, which blinks at 3.2 Hz. This 5-character display indicates the “repaired by:”, “block” in which the problem occurred, and “detailed code” of the problem.


Viewfinder or LCD screen
C : 3 1 : 1 1
Blinks at 3.2Hz
C : 3 1 : 1 1
Repaired by:
Block
Detailed Code
C : Corrected by customer
H : Corrected by dealer
E : Corrected by service engineer
Indicates the appropriate step to be taken.
E.g.
31 ....Reload the tape.
32 ....Turn on power again.
Refer to “1-5-3. Self-diagnosis Code Table”.

1-5-3. Self-diagnosis Code Table

Self-diagnosis Code				Symptom/State	Correction
Repaired by:	Block Function		Detailed Code		
C	0	4	0 0	Non-standard battery is used.	Use the InfoLITHIUM battery.
C	0	6	0 0	The battery is too hot.	Replace the battery or remove it and put it in cool place.
C	2	1	0 0	Condensation.	Remove the cassette, and insert it again after one hour.
C	2	2	0 0	Video head is dirty.	Clean with the optional cleaning cassette.
C	3	1	1 0	LOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	1 1	UNLOAD direction. Loading does not complete within specified time	Load the tape again, and perform operations from the beginning.
C	3	1	2 0	T reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3	1	2 1	S reel side tape slacking when unloading.	Load the tape again, and perform operations from the beginning.
C	3	1	2 2	T reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2 3	S reel fault.	Load the tape again, and perform operations from the beginning.
C	3	1	2 4	T reel and S reel FG short fault.	Load the tape again, and perform operations from the beginning.
C	3	1	3 0	FG fault when starting capstan.	Load the tape again, and perform operations from the beginning.
C	3	1	4 0	FG fault when starting drum.	Load the tape again, and perform operations from the beginning.
C	3	1	4 2	FG fault during normal drum operations.	Load the tape again, and perform operations from the beginning.
C	3	1	7 2	Retry fault when catching one's finger in cassette compartment.	Load the tape again, and perform operations from the beginning.
C	3	1	9 7	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Load the tape again, and perform operations from the beginning.
C	3	1	9 8	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Load the tape again, and perform operations from the beginning.
C	3	1	9 9	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Load the tape again, and perform operations from the beginning.
C	3	2	1 0	LOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	1 1	UNLOAD direction loading motor time-out.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2 0	T reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2 1	S reel side tape slacking when unloading.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2 2	T reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2 3	S reel fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	2 4	T reel and S reel FG short fault.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	3 0	FG fault when starting capstan.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4 0	FG fault when starting drum.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	4 2	FG fault during normal drum operations.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3	2	6 0	Difficult to adjust focus (Cannot initialize focus.)	Remove the battery or power cable, connect, and perform operations from the beginning. If it does not recover, inspect the focus MR sensor of lens drive block (Pin ⑩, ⑫ of CN5002 on the VC-543 board). If not faulty, inspect the focus motor drive circuit (IC6001 on the VC-543 board).

Self-diagnosis Code			Symptom/State	Correction
Repaired by:	Block Function	Detailed Code		
C	3 2	7 2	Retry fault when catching one's finger in cassette compartment.	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	9 7	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	9 8	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Remove the battery or power cable, connect, and perform operations from the beginning.
C	3 2	9 9	Vector fault (Judgement with the set state that is impossible actually for fault of sensors.)	Remove the battery or power cable, connect, and perform operations from the beginning.
E	2 0	0 0	EEPROM data are rewritten.	Make EEPROM data correct value.
E	6 1	1 0	Zoom operations fault (Cannot initialize zoom lens.)	Inspect the zoom MR sensor of lens drive block (Pin ㉜, ㉞ of CN5002 on the VC-543 board) when zooming is performed when the zoom switch is operated and the zoom motor drive circuit (IC6001 on the VC-543 board) when zooming is not performed.
E	6 1	1 1	Focus lens initializing failure and zoom lens initializing failure occur simultaneously.	Check both C: 32: 60 and E: 61: 10 of the self-diagnosis code.
E	6 1	3 0	Reset position detect error when stepper iris is initialized.	Turn on the power and set to T (telephoto) end by rotating the ZOOM manual ring. While observing the iris blades in the lens, turn on the power again and check the iris blades in the lens work properly. Inspect the iris drive motor of lens drive block (Pin ⑯ to ⑲ of CN5002 on the VC-543 board), when the iris does not operate. Inspect the iris reset sensor of lens drive block (Pin ⑬ to ⑮ of CN5002 on the VC-543 board), when the iris operate.
E	6 2	0 0	Steadyshot function does not work well. (With pitch angular velocity sensor output stopped.)	Inspect pitch angular velocity sensor (SE8501 on the GY-014 board) peripheral circuits.
E	6 2	0 1	Steadyshot function does not work well. (With yaw angular velocity sensor output stopped.)	Inspect yaw angular velocity sensor (SE8502 on the GY-014 board) peripheral circuits.
E	6 2	0 2	Abnormality of IC for steadyshot.	Inspect the steadyshot circuit (IC7001 on the VC-543 board). If it does not recover, replace the VC-543 board. (Note) If an error occurs again, replace the lens block.
E	6 2	0 3	IC for steadyshot and micro controller communication abnormality among.	Inspect the steadyshot circuit (IC7001 on the VC-543 board).
E	6 2	1 0	Shift lens initializing failure	Inspect the EEPROM (IC4202 on the VC-543 board). If it does not recover, replace the VC-543 board. (Note) If an error occurs again, replace the lens block.
E	6 2	1 1	Shift lens overheating (Pitch)	Inspect the IC7001 and peripheral circuits on the VC-543 board. If it does not recover, replace the VC-543 board. (Note) If an error occurs again, replace the lens block.
E	6 2	1 2	Shift lens overheating (Yaw)	Inspect the IC7001 and peripheral circuits on the VC-543 board. If it does not recover, replace the VC-543 board. (Note) If an error occurs again, replace the lens block.
E	6 2	2 0	Abnormality of lens thermister	Inspect the IC7001 and peripheral circuits on the VC-543 board. If it does not recover, replace the VC-543 board. (Note) If an error occurs again, replace the lens block.

Note: When replacing the VC-543 board, remove the EEPROM (IC4202) from the VC-543 board that is going to be repaired. Install the removed EEPROM (IC4202) to the replaced VC-543 board.

1. SERVICE NOTE

ENGLISH JAPANESE

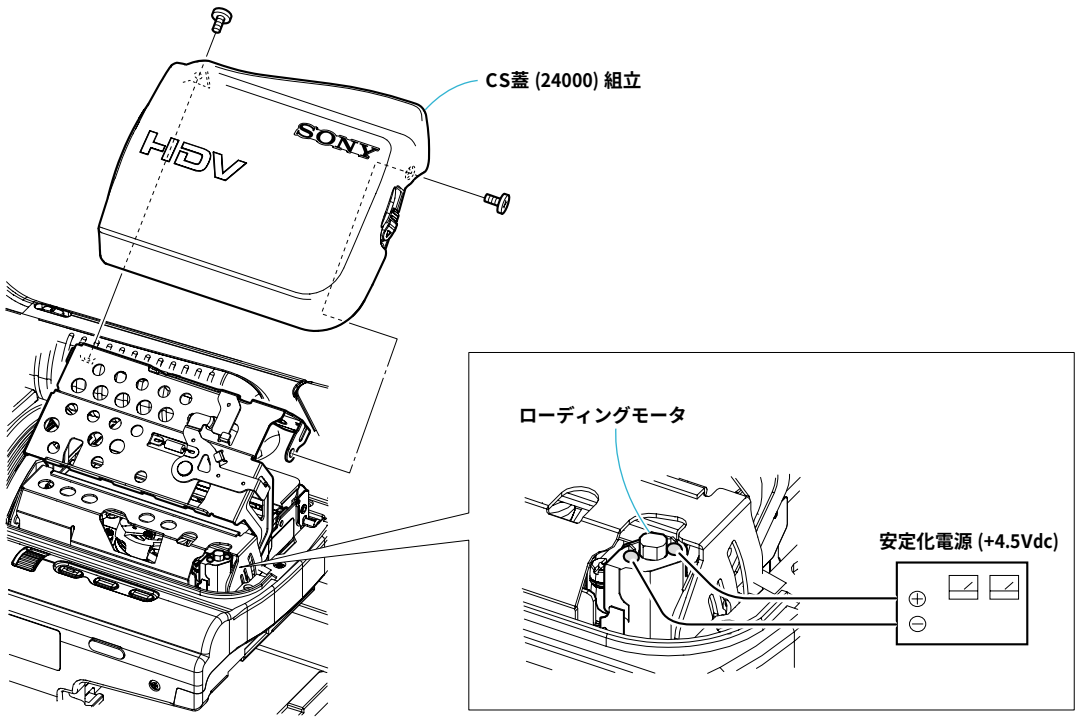
1-1. 修理時の電源供給について

本機では，安定化電源（8.4Vdc）からバッテリ端子に電源を供給した場合，約10秒後にシャットオフし，動作しなくなります。
これを避けるため，下記の方法を用いてください。

方法：
ACアダプタ（AC-L100）を使用する。

1-2. イジェクトしない時のカセット取出し方法（強制イジェクト）

① 電源を外す。
② ねじ2本とCS蓋 (24000) 組立を外す。
③ 安定化電源より＋4.5Vをローディングモータに加え，アンローディングさせる。



1-3. 強制電源ONモードの設定

調整リモコン（RM-95またはNEW LANC JIG）を使用して，電源を入れることが出来ます。
VTR操作は調整リモコンで行えます。

1-3-1. 強制カメラ電源ONモードの設定

1) ページ：0，アドレス：01にデータ：01をセット。
2) ページ：A，アドレス：10にデータ：01をセットしPAUSE（Write）ボタンを押す。

1-3-2. 強制VTR電源ONモードの設定

1) ページ：0，アドレス：01にデータ：01をセット。
2) ページ：A，アドレス：10にデータ：02をセットしPAUSE（Write）ボタンを押す。

1-3-3. 強制電源ONモードの解除

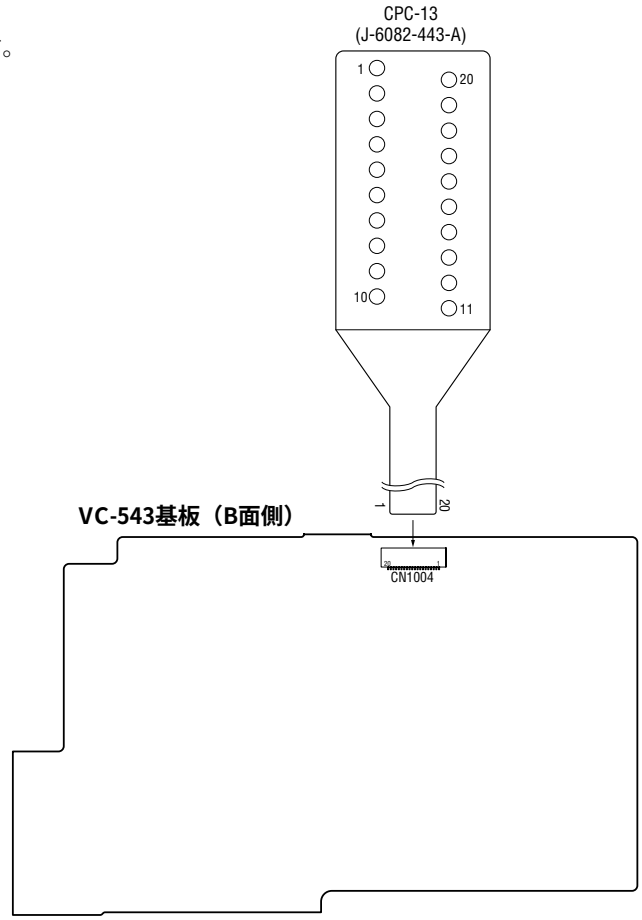
1) ページ：0，アドレス：01にデータ：01をセット。
2) ページ：A，アドレス：10にデータ：00をセットしPAUSE（Write）ボタンを押す。
3) ページ：0，アドレス：01にデータ：00をセット。

1-4. 使用サービス治具

CPC-13治具（J-6082-443-A）をVC-543基板CN1004に接続します。

端子番号	信号名称	端子番号	信号名称
1 (20)	REG_GND	11 (10)	EEP_SO_C
2 (19)	RF_MON	12 (9)	EEP_SO_S
3 (18)	REG_GND	13 (8)	EEP_SCK_C
4 (17)	SWP	14 (7)	EEP_SCK_S
5 (16)	FRRV	15 (6)	D_2.8V
6 (15)	REG_GND	16 (5)	MD2_C
7 (14)	GND	17 (4)	MD2
8 (13)	GND	18 (3)	XCS_MC_FLASH_C
9 (12)	EEP_SI_C	19 (2)	XCS_MC_FLASH
10 (11)	EEP_SI_S	20 (1)	XSYS_RST

注意：( )内の端子番号は，VC-543基板CN1004のテスト端子番号です。



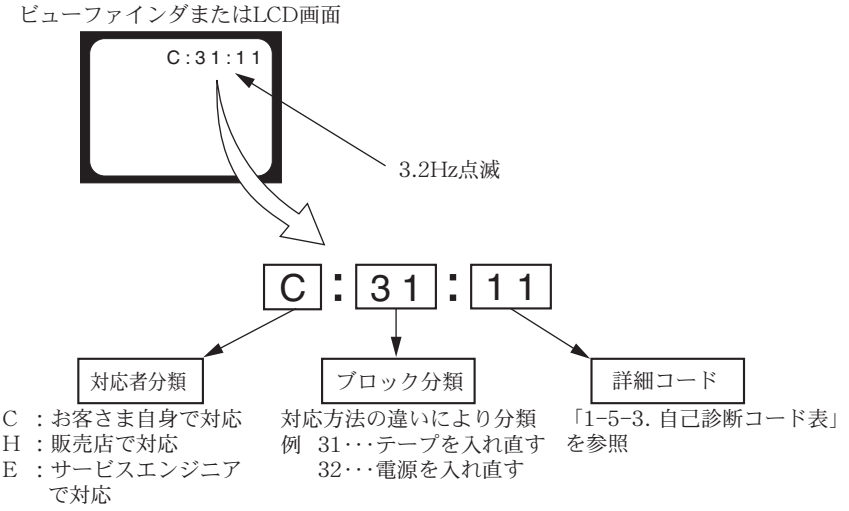
1-5. 自己診断機能

1-5-1. 自己診断機能について

本機の動作に不具合が生じたとき，自己診断機能が働き，ビューファインダまたはLCD画面に，どう処置したらよいか判断できる表示を行います。自己診断機能については取扱説明書にも掲載されています。

1-5-2. 自己診断表示

本機の動作に不具合が生じたとき，ビューファインダまたはLCD画面のカウンタ表示部分がアルファベットと数字の4桁表示になり，3.2Hzで点滅します。この5文字の表示によって対応者分類および不具合の生じたブロックの分類，不具合の詳細コードを示します。



1-5-3. 自己診断コード表

自己診断コード			症状／状態	対応／方法
対応者	ブロック機能	詳細コード		
C	0 4	0 0	標準でないバッテリを使用している	インフォリチウムバッテリを使用する。
C	0 6	0 0	バッテリが高温になっている	バッテリを交換するか、バッテリを涼しいところに置く。
C	2 1	0 0	結露している	カセットを取り出して，約1時間してからもう一度入れ直す。
C	2 2	0 0	ビデオヘッドが汚れている	別売のクリーニングカセットできれいにする。
C	3 1	1 0	LOAD方向，ローディング所定時間内終了せず	テープを入れ直し，再度操作し直す。
C	3 1	1 1	UNLOAD方向，ローディング所定時間内終了せず	テープを入れ直し，再度操作し直す。
C	3 1	2 0	UNLOAD時，Tリール側テープ弛み	テープを入れ直し，再度操作し直す。
C	3 1	2 1	UNLOAD時，Sリール側テープ弛み	テープを入れ直し，再度操作し直す。
C	3 1	2 2	Tリール異常	テープを入れ直し，再度操作し直す。
C	3 1	2 3	Sリール異常	テープを入れ直し，再度操作し直す。
C	3 1	2 4	TリールおよびSリールFGショート異常	テープを入れ直し，再度操作し直す。
C	3 1	3 0	キャプスタン起動時FG異常	テープを入れ直し，再度操作し直す。
C	3 1	4 0	ドラム起動時FG異常	テープを入れ直し，再度操作し直す。
C	3 1	4 2	ドラム定常時FG異常	テープを入れ直し，再度操作し直す。
C	3 1	7 2	カセコン指はさみリトライ異常	テープを入れ直し，再度操作し直す。
C	3 1	9 7	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	テープを入れ直し，再度操作し直す。
C	3 1	9 8	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	テープを入れ直し，再度操作し直す。
C	3 1	9 9	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	テープを入れ直し，再度操作し直す。
C	3 2	1 0	LOAD方向，ローディング所定時間内終了せず	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	1 1	UNLOAD方向，ローディング所定時間内終了せず	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	2 0	UNLOAD時，Tリール側テープ弛み	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	2 1	UNLOAD時，Sリール側テープ弛み	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	2 2	Tリール異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	2 3	Sリール異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	2 4	TリールおよびSリールFGショート異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	3 0	キャプスタン起動時FG異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	4 0	ドラム起動時FG異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	4 2	ドラム定常時FG異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3 2	6 0	フォーカスが合いにくい（フォーカスの初期化ができない）	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。復帰しない場合,レンズドライブブロックのフォーカスMRセンサ(VC-543基板CN5002 ⑩,⑫ ピン)を点検。問題がなければフォーカスモータドライブ回路(VC-543基板IC6001)を点検。

自己診断コード				症状／状態	対応／方法
対応者	ブロック機能		詳細コード		
C	3	2	7 2	カセコン指はさみリトライ異常	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3	2	9 7	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3	2	9 8	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
C	3	2	9 9	ベクタ異常（センサ類の異常で現実に有り得ないセット状態と判断）	バッテリまたは電源ケーブルを外して付け直し,再度操作し直す。
E	2	0	0 0	EEPROMが書き換えられている	EEPROMのデータを元の値に戻す。
E	6	1	1 0	ズーム動作の異常(ズームレンズの初期化ができない)	ズームレバーを操作した時,ズーム動作をすればレンズドライブブロックのズームMRセンサ(VC-543基板CN5002 ㉜, ㉞ピン)を点検。ズーム動作をしなければズームモータドライブ回路(VC-543基板IC6001)を点検。
E	6	1	1 1	フォーカスレンズ初期化異常,ズームレンズ初期化異常の同時発生	自己診断コードC: 32: 60とE: 61: 10の両方を点検。
E	6	1	3 0	ステッパアイリス初期化時リセット位置検出エラー	電源投入後,ズームマニュアルリングを回してT(telephoto)端にする。レンズ内のアイリス羽に注目しながら電源を再投入し,レンズ内の羽が動作しているか確認する。アイリスが動作しない場合は,レンズドライブブロックのアイリスモータドライブ(VC-543基板CN5002 ⑯～⑲ピン)を点検。アイリスが動作する場合は,レンズドライブブロックのアイリスリセットセンサ(VC-543基板CN5002 ⑬～⑮ピン)を点検。
E	6	2	0 0	手振れ補正が効きにくい(PITCH角速度センサ出力張り付き)	PITCH角速度センサ(GY-014基板SE8501)周辺回路を点検。
E	6	2	0 1	手振れ補正が効きにくい(YAW角速度センサ出力張り付き)	YAW角速度センサ(GY-014基板SE8502)周辺回路を点検。
E	6	2	0 2	手振れ補正用ICの異常	手振れ補正回路(VC-543基板IC7001)を点検。復帰しない場合,VC-543基板を交換する。(注意)エラーが再度発生する場合は,レンズブロックを交換する。
E	6	2	0 3	手振れ補正用ICとマイクロコントローラとの通信異常	手振れ補正回路(VC-543基板IC7001)を点検。
E	6	2	1 0	シフトレンズ初期化異常	EEPROM(VC-543基板IC4202)を点検。復帰しない場合,VC-543基板を交換する。(注意)エラーが再度発生する場合は,レンズブロックを交換する。
E	6	2	1 1	シフトレンズオーバーヒート(PITCH)	VC-543基板のIC7001および周辺回路を点検。復帰しない場合,VC-543基板を交換する。(注意)エラーが再度発生する場合は,レンズブロックを交換する。
E	6	2	1 2	シフトレンズオーバーヒート(YAW)	VC-543基板のIC7001および周辺回路を点検。復帰しない場合,VC-543基板を交換する。(注意)エラーが再度発生する場合は,レンズブロックを交換する。
E	6	2	2 0	レンズサーミスタの異常	VC-543基板のIC7001および周辺回路を点検。復帰しない場合,VC-543基板を交換する。(注意)エラーが再度発生する場合は,レンズブロックを交換する。

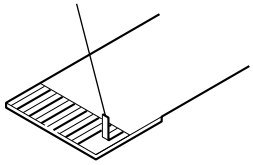
注意 ： VC-543基板を交換する場合は，修理するVC-543基板からEEPROM(IC4202)を取り外す。取り外したEEPROM(IC4202)は取り替えたVC-543基板に取り付ける。

2. DISASSEMBLY

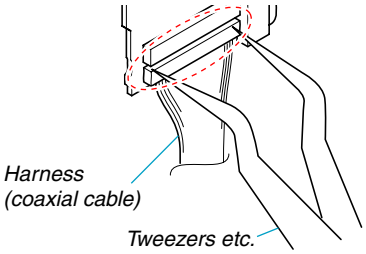
NOTE FOR REPAIR

- Make sure that the flat cable and flexible board are not cracked of bent at the terminal. Do not insert the cable insufficiently nor crookedly.
- When remove a connector, don't pull at wire of connector. It is possible that a wire is snapped.
- When installing a connector, don't press down at wire of connector. It is possible that a wire is snapped.

Cut and remove the part of gilt which comes off at the point. (Be careful or some pieces of gilt may be left inside)

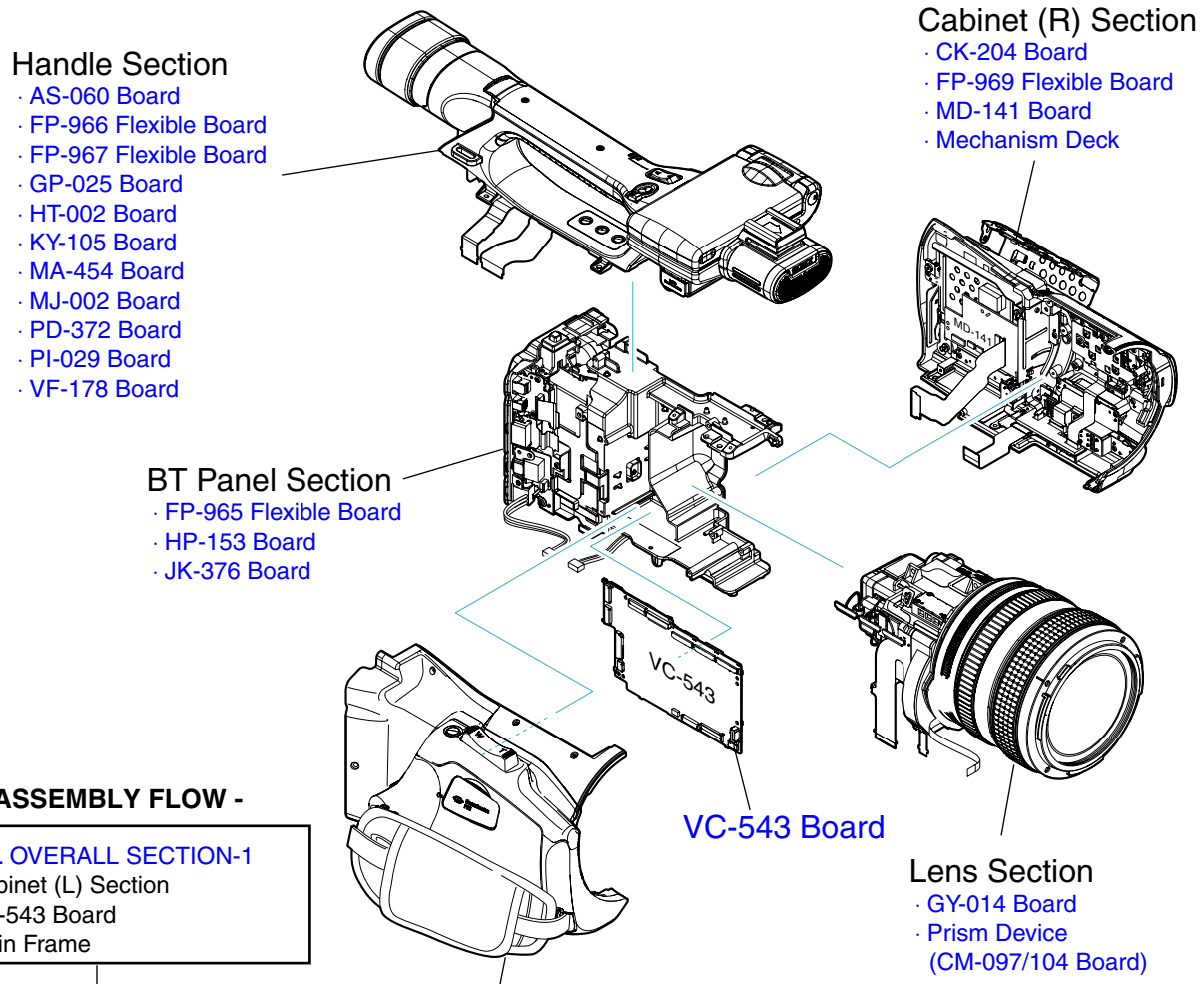


NOTE FOR DISCONNECTING THE HARNESS (COAXIAL CABLE)



When disconnecting the harness (COAXIAL CABLE), do not pull the harness part but pull off the connector body with tweezers etc.

2-1. IDENTIFYING PARTS



- DISASSEMBLY FLOW -

- 2-2-1. OVERALL SECTION-1
  - · Cabinet (L) Section
  - · VC-543 Board
  - · Main Frame
- 2-2-2. OVERALL SECTION-2
  - · Cabinet (R) Section
  - · Handle Section-1
  - · Lens Section
- 2-2-3. CABINET (R) SECTION
  - · MD Section
  - · CK-204 Board
  - · AL Lid (24000)
- 2-2-4. MD SECTION
  - · Mechanism Deck
- 2-2-5. HANDLE SECTION-1
  - · EVF Section
- 2-2-6. HANDLE SECTION-2
  - · Control Panel Block
  - · PI-029 Board
  - · LCD Section
- 2-2-7. HANDLE SECTION-3
  - · GP-025 Board
  - · Handle Section-4
- 2-2-8. HANDLE SECTION-4
  - · AS-060 Board
  - · Microphone Section
- 2-2-9. LCD SECTION
  - · Hinge Block
  - · LCD
- 2-2-10. CABINET (L) SECTION
  - · Cabinet (L) Block
  - · Cabinet (G) Block

HELP

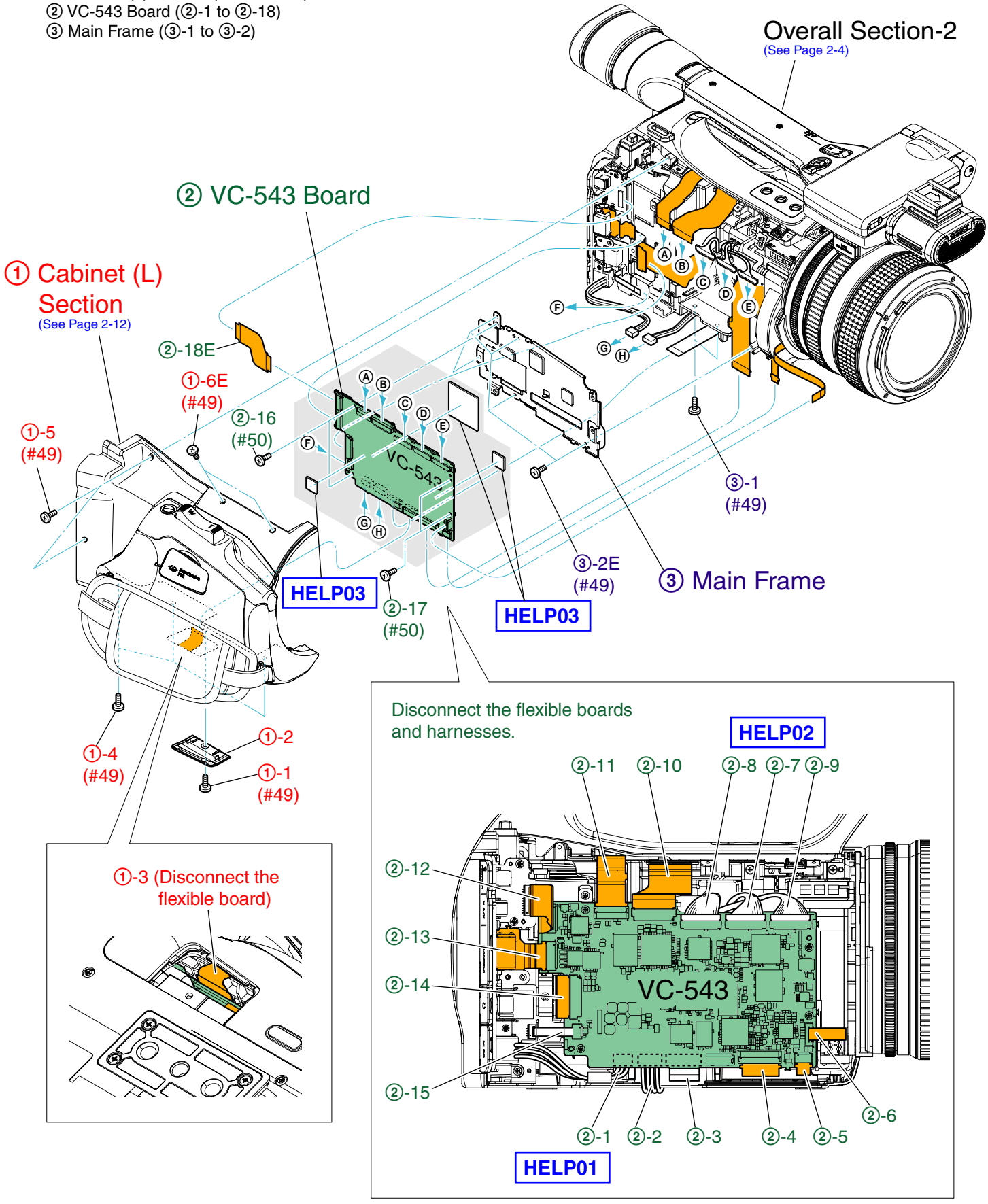
2-2. DISASSEMBLY

EXPLODED VIEW HARDWARE LIST

2-2-1. OVERALL SECTION-1

Follow the disassembly in the numerical order given.

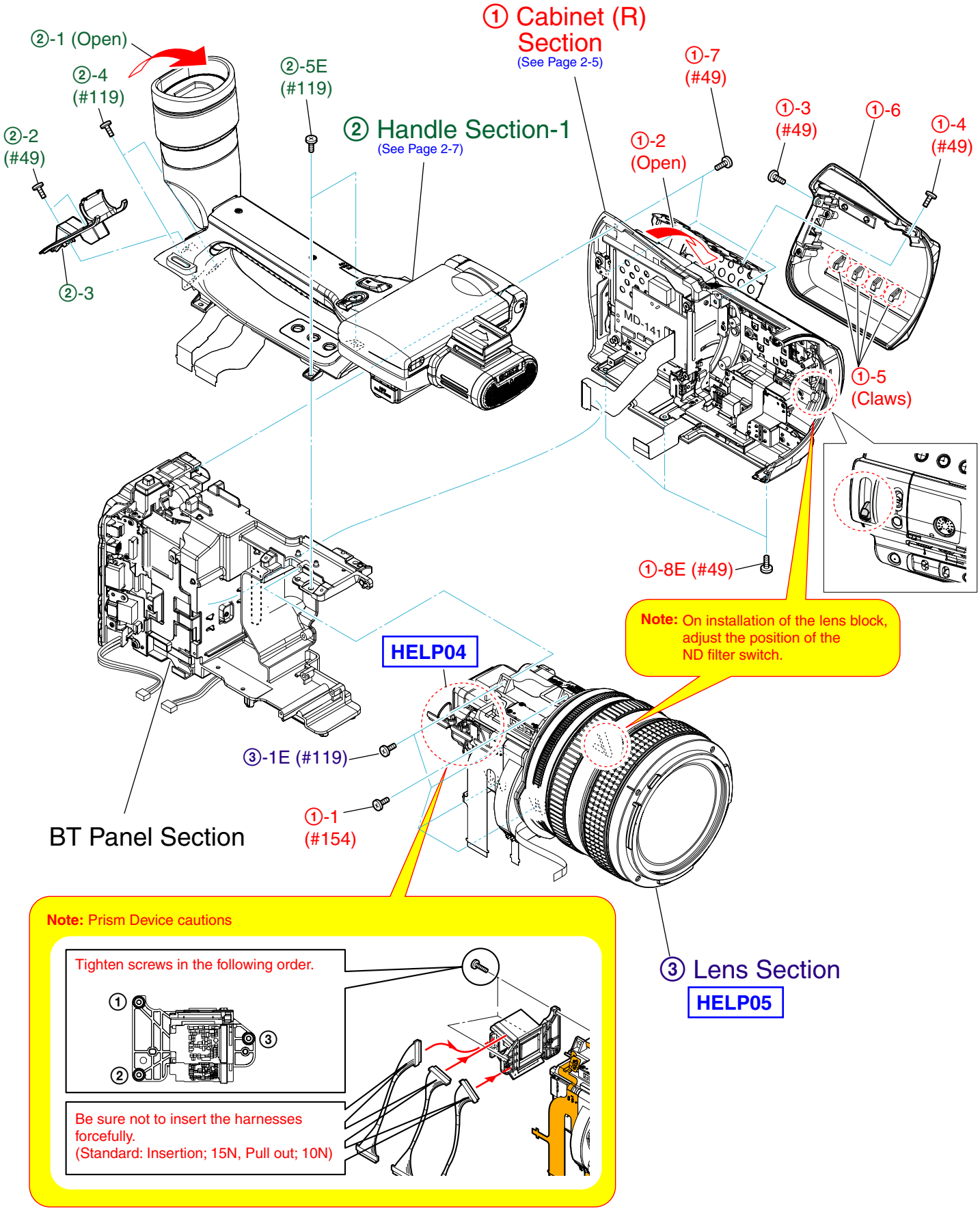
① Cabinet (L) Section (①-1 to ①-6)
② VC-543 Board (②-1 to ②-18)
③ Main Frame (③-1 to ③-2)



2-2-2. OVERALL SECTION-2

EXPLODED VIEW HARDWARE LIST

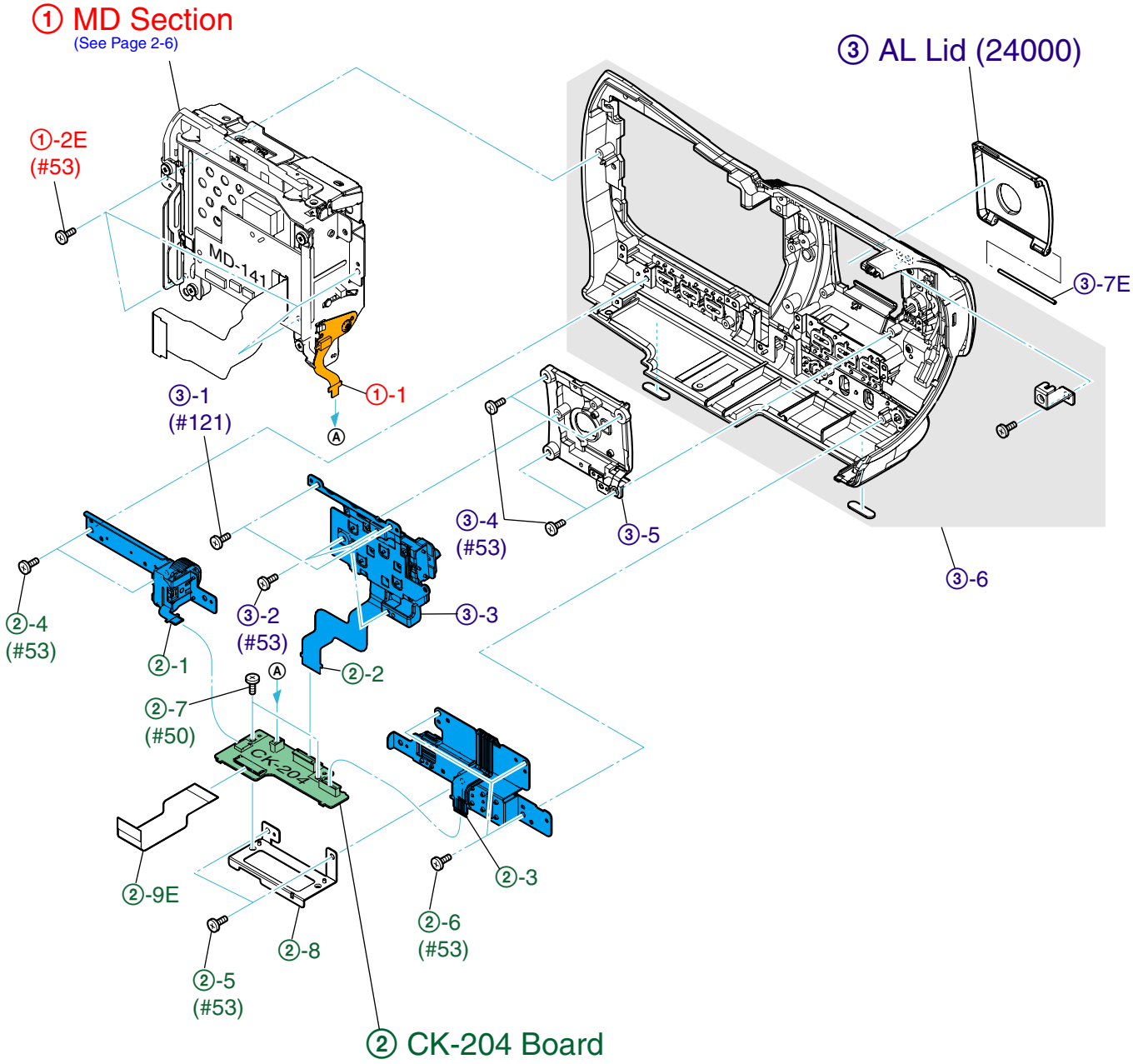
Follow the disassembly in the numerical order given.
① Cabinet (R) Section (①-1 to ①-8)
② Handle Section-1 (②-1 to ②-5)
③ Lens Section (③-1)



2-2-3. CABINET (R) SECTION

EXPLODED VIEW HARDWARE LIST

Follow the disassembly in the numerical order given.
① MD Section (①-1 to ①-2)
② CK-204 Board (②-1 to ②-9)
③ AL Lid (24000) (③-1 to ③-7)

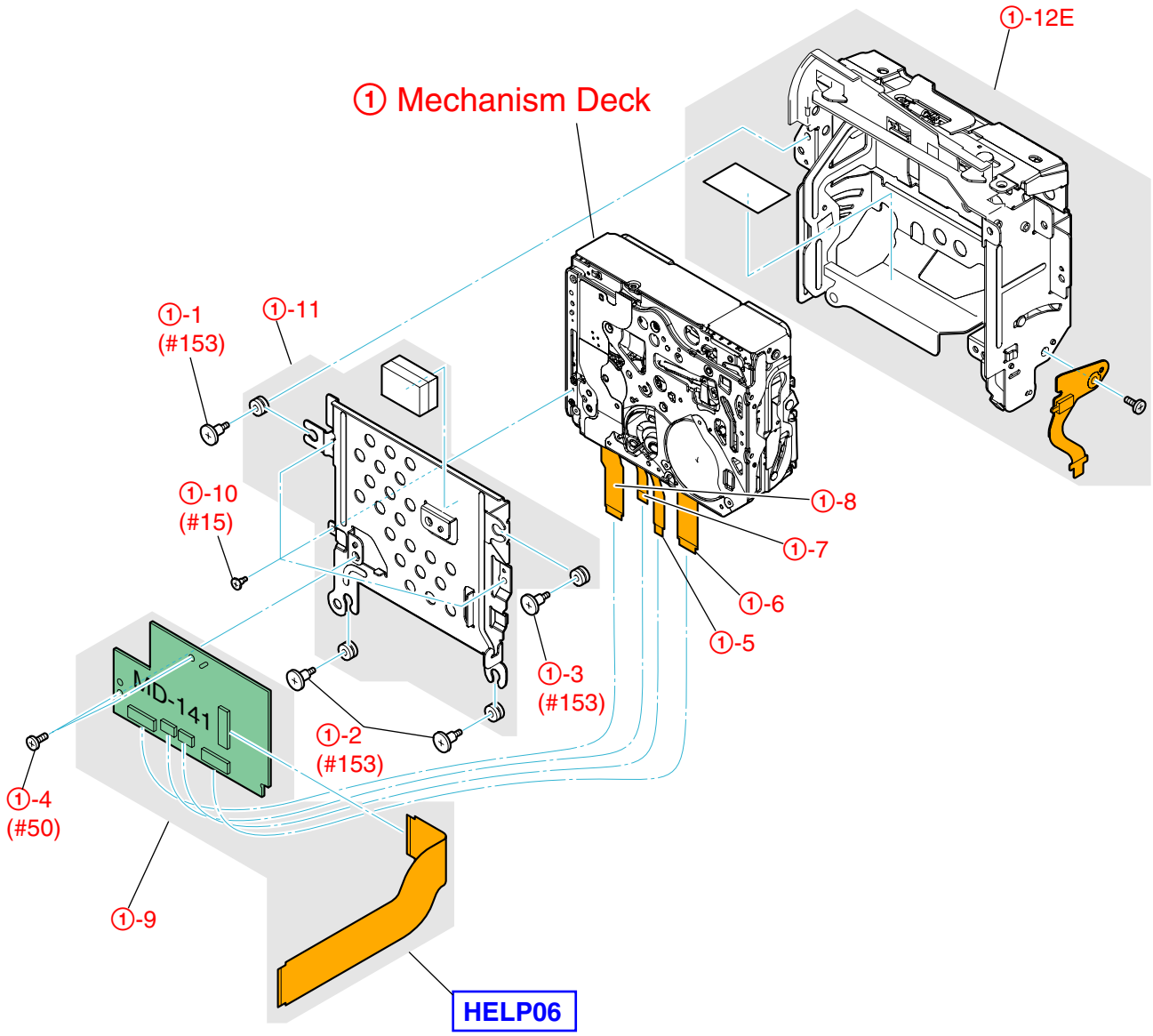


2-2-4. MD SECTION

Follow the disassembly in the numerical order given.

① Mechanism Deck (①-1 to ①-12)

EXPLODED VIEW HARDWARE LIST

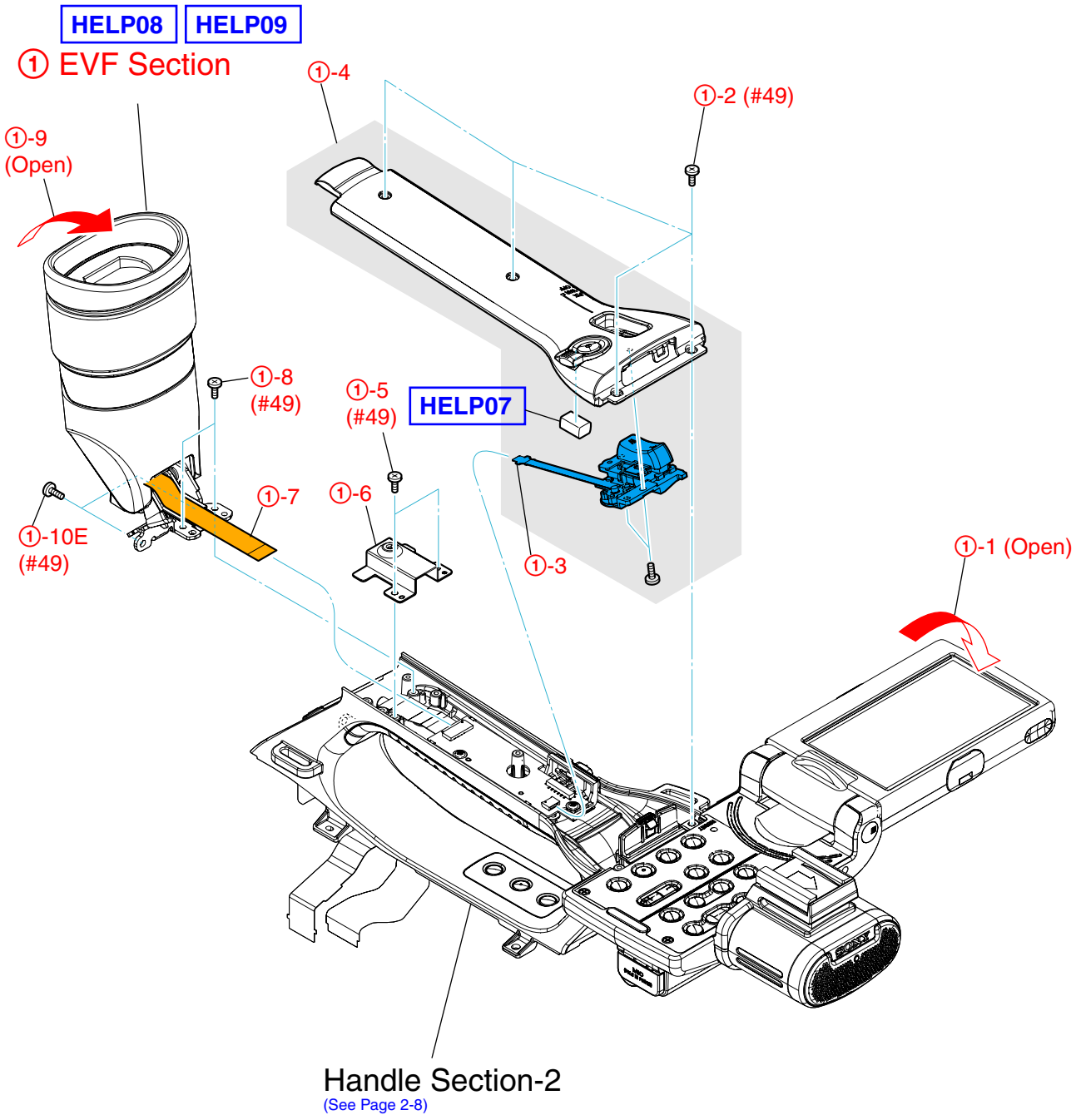


2-2-5. HANDLE SECTION-1

Follow the disassembly in the numerical order given.

① EVF Section (①-1 to ①-10)

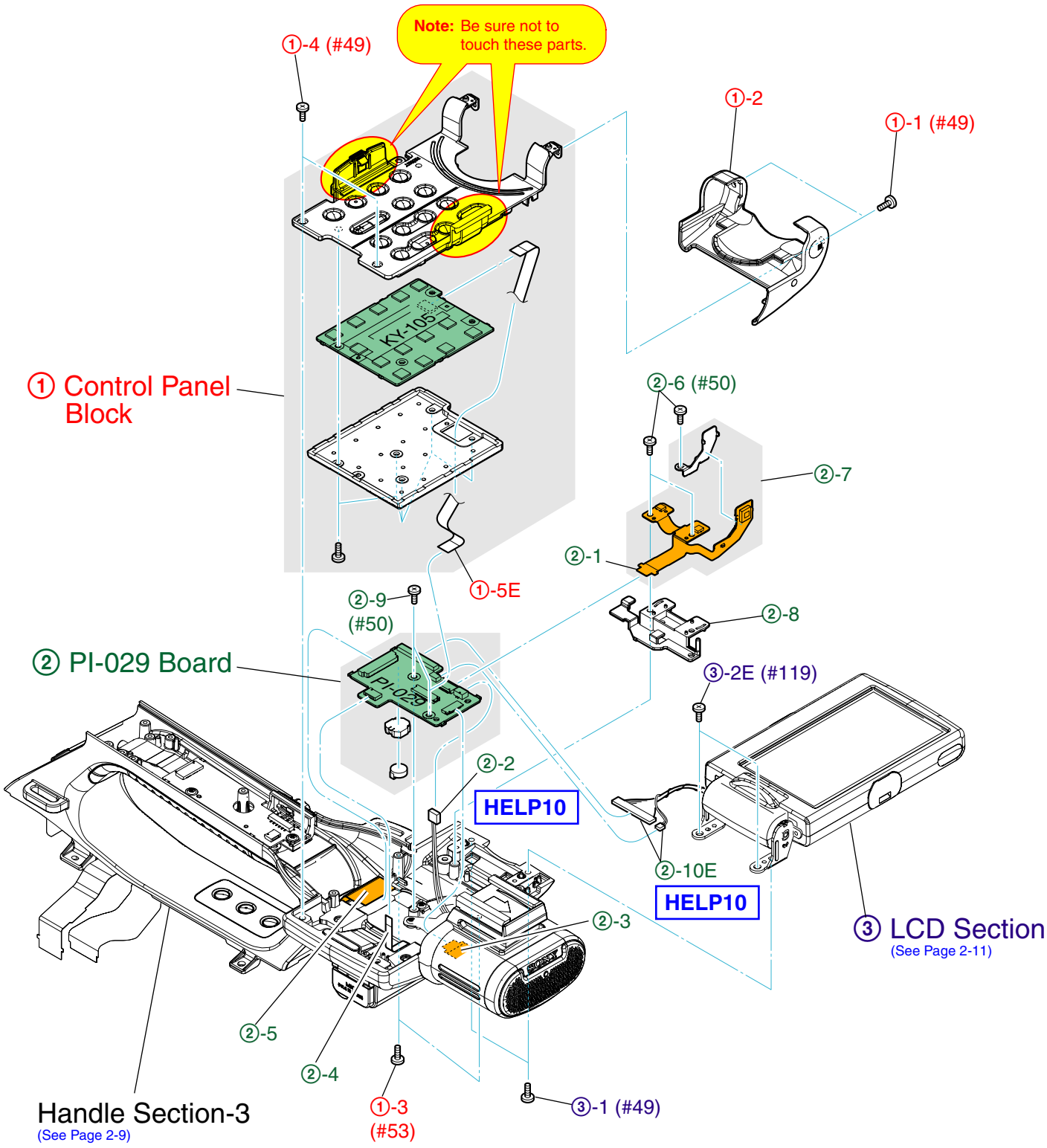
EXPLODED VIEW HARDWARE LIST



2-2-6. HANDLE SECTION-2

EXPLODED VIEW | HARDWARE LIST

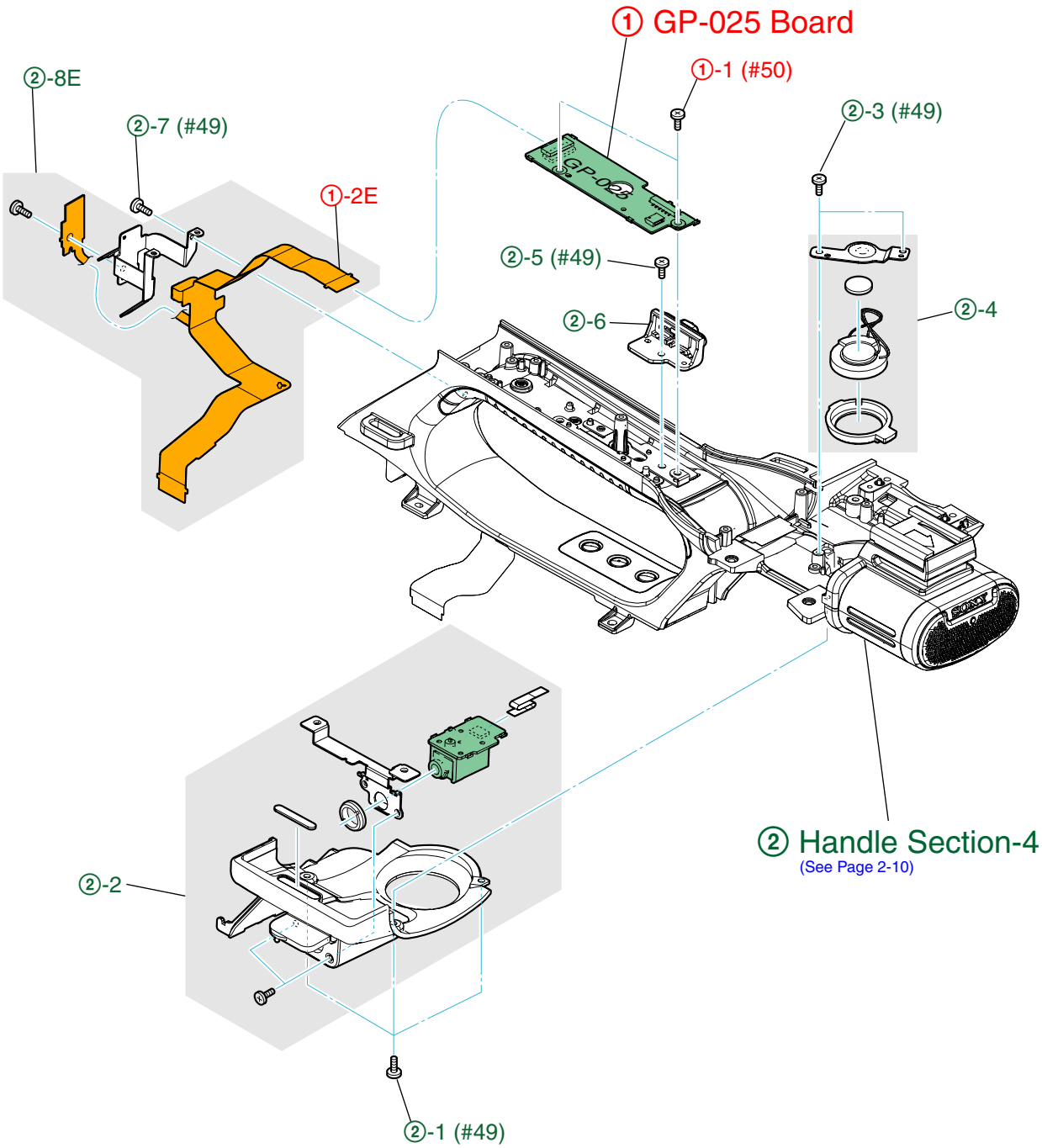
Follow the disassembly in the numerical order given.
① Control Panel Block (①-1 to ①-5)
② PI-029 Board (②-1 to ②-10)
③ LCD Section (③-1 to ③-2)



2-2-7. HANDLE SECTION-3

Follow the disassembly in the numerical order given.
① GP-025 Board (①-1 to ①-2)
② Handle Section-4 (②-1 to ②-8)

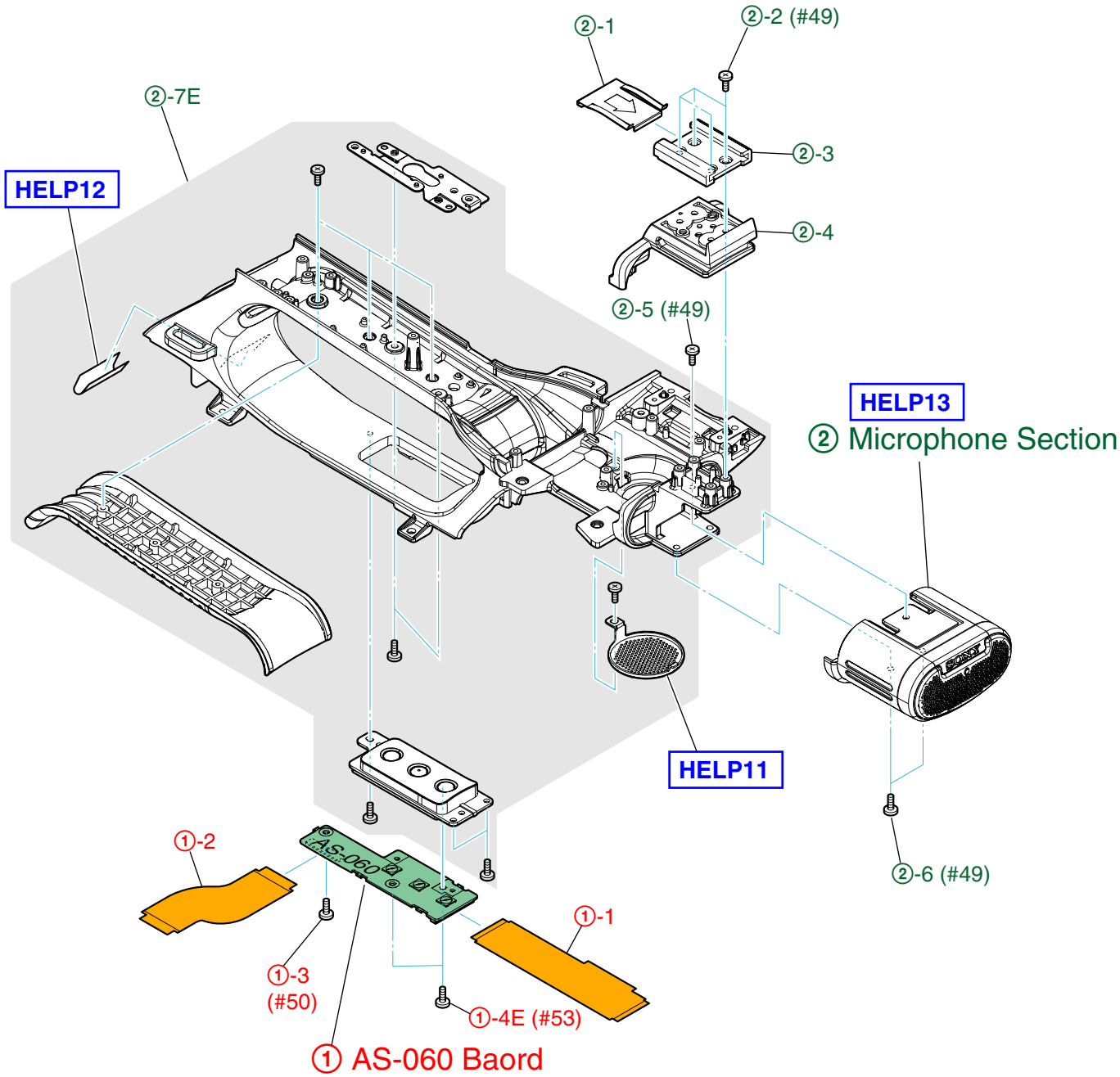
EXPLODED VIEW HARDWARE LIST



2-2-8. HANDLE SECTION-4

Follow the disassembly in the numerical order given.
① AS-060 Board (①-1 to ①-4)
② Microphone Section (②-1 to ②-7)

EXPLODED VIEW HARDWARE LIST



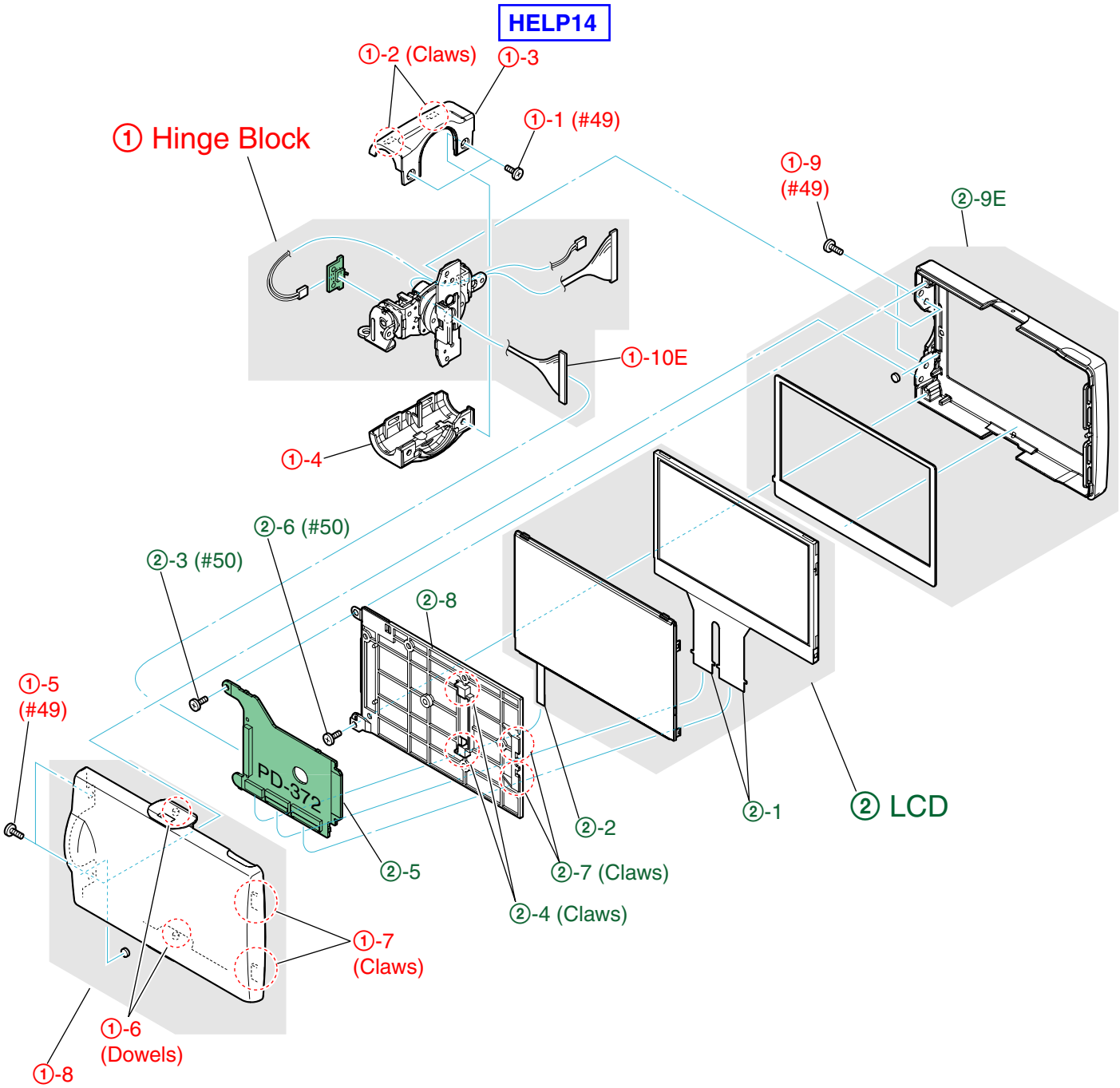
2-2-9. LCD SECTION

Follow the disassembly in the numerical order given.

① Hinge Block (①-1 to ①-10)

② LCD (②-1 to ②-9)

EXPLODED VIEW HARDWARE LIST



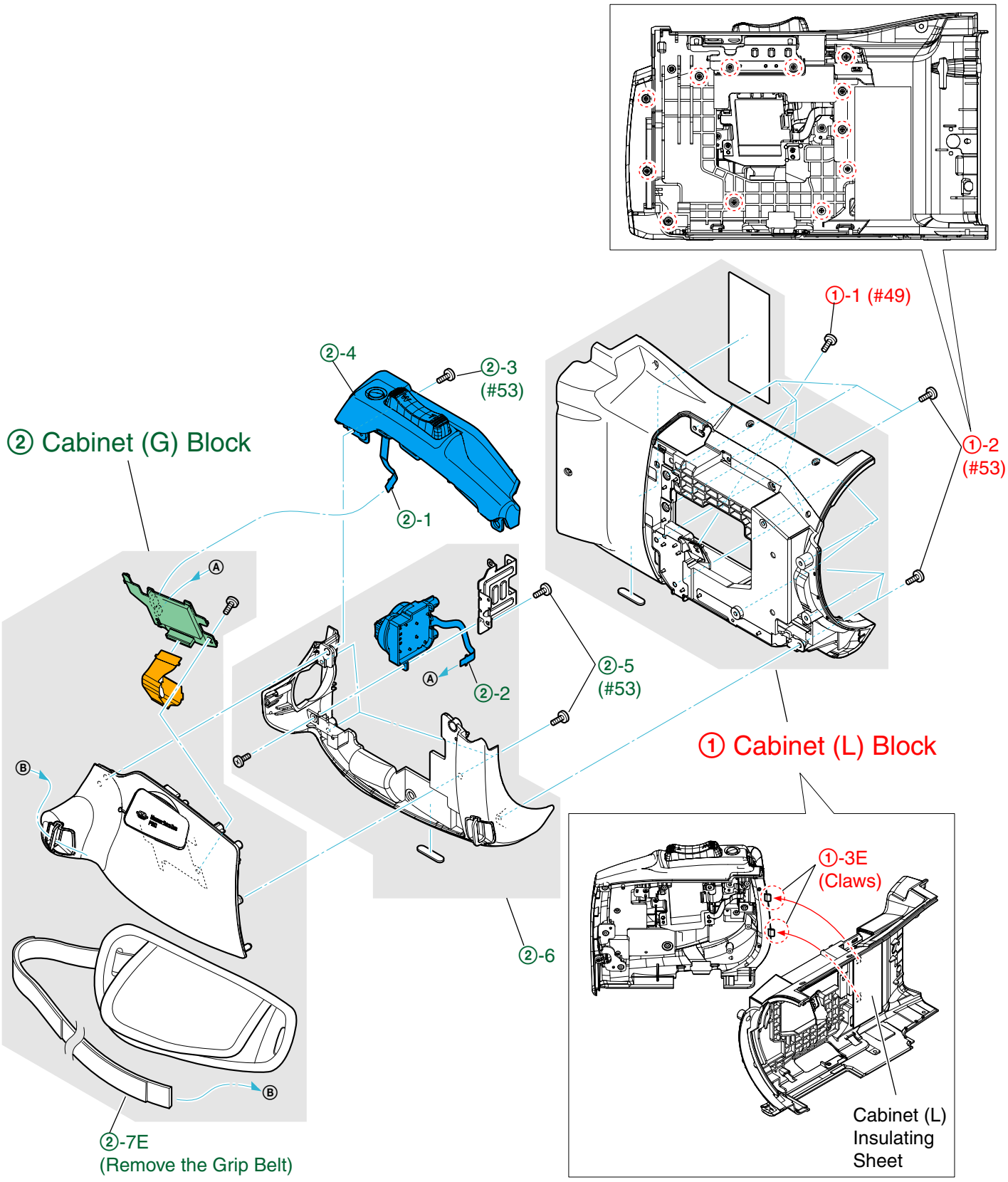
2-2-10. CABINET (L) SECTION

Follow the disassembly in the numerical order given.

① Cabinet (L) Block (①-1 to ①-3)

② Cabinet (G) Block (②-1 to ②-7)

EXPLODED VIEW HARDWARE LIST

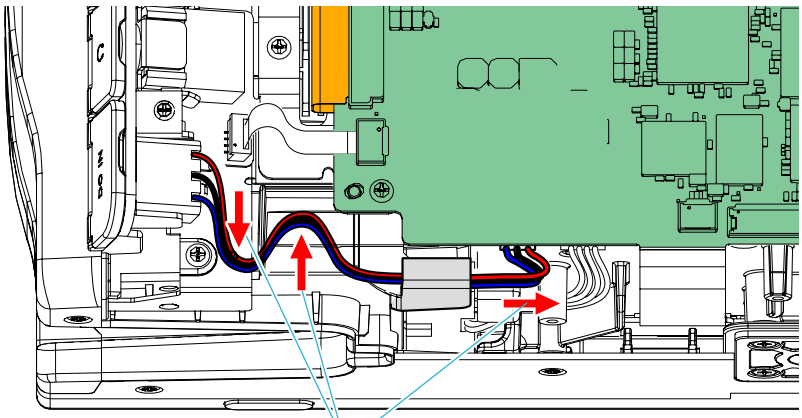


HELP

Sheet attachment positions and procedures of processing the flexible boards/harnesses are shown.

HELP01

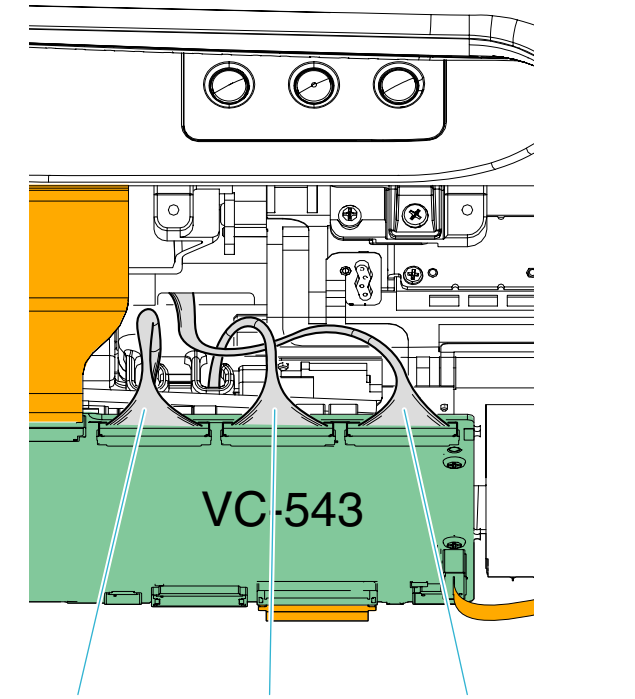
How to arrange Harness (DC-IN Connector).



Crease the Harness (DC-IN Connector)
as shown in the figure.

HELP02

How to arrange Harness (Coaxial Cable).



Harness
(Coaxial Cable)
(R)

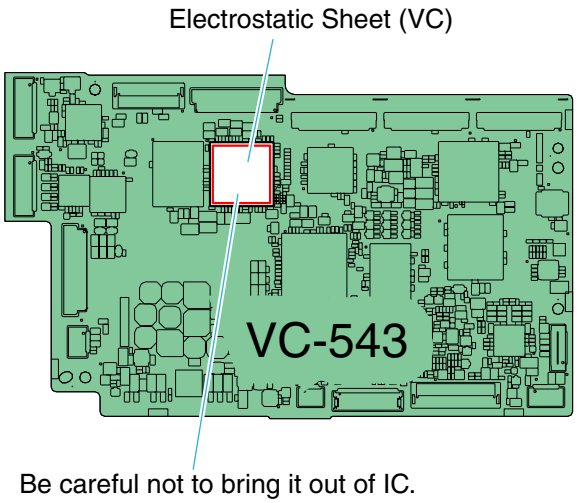
Harness
(Coaxial Cable)
(G)

Harness
(Coaxial Cable)
(B)

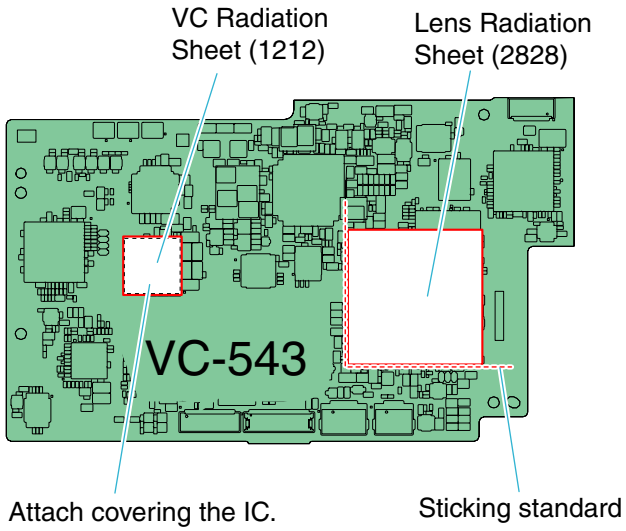
HELP03

Sticking standard of Sheets (to VC-543 Board).

a. VC-543 Board (Side A)

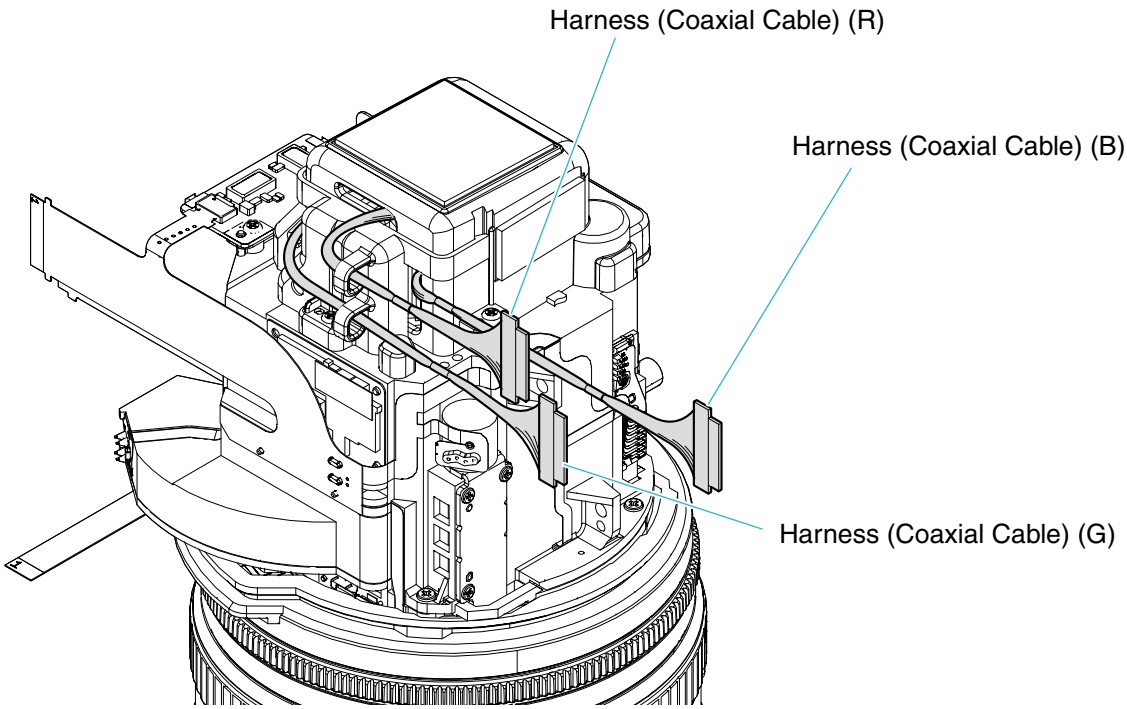


b. VC-543 Board (Side B)



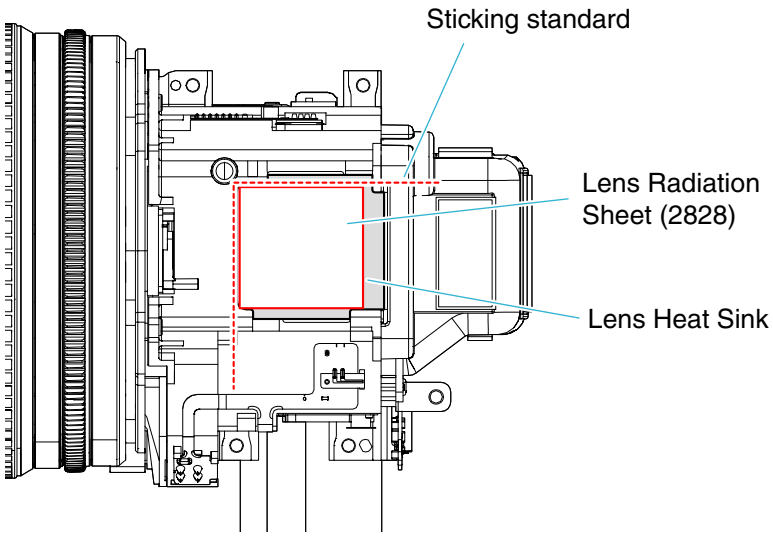
HELP04

How to arrange Harnesses (Coaxial Cable).



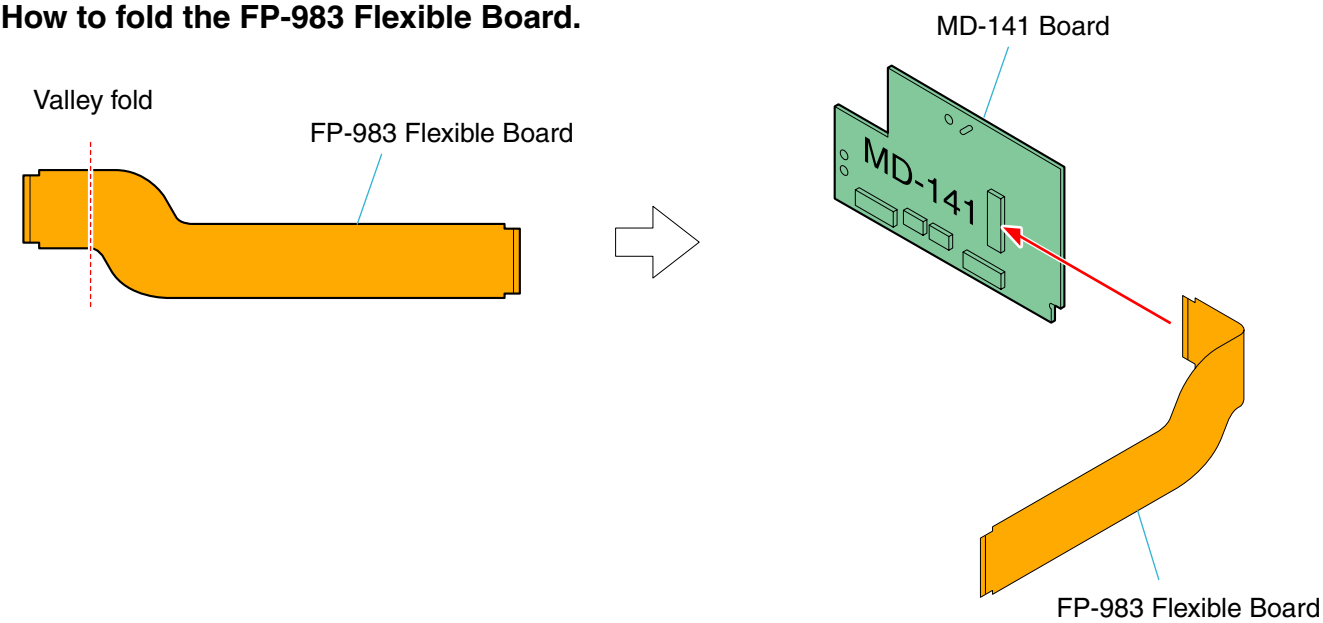
HELP05

Sticking standard of the Lens Radiation Sheet (2828).



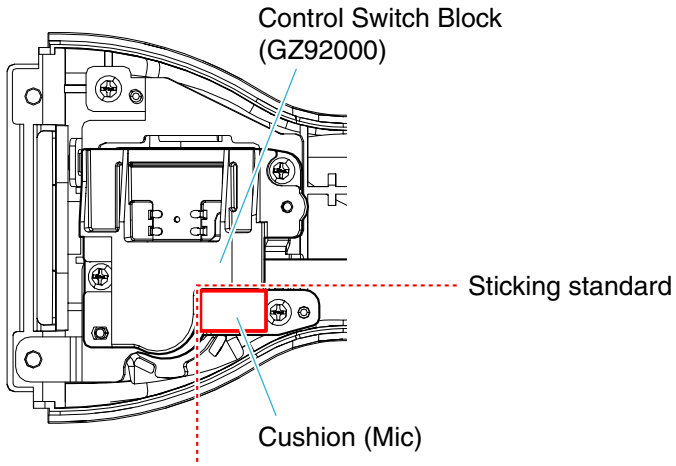
HELP06

How to fold the FP-983 Flexible Board.



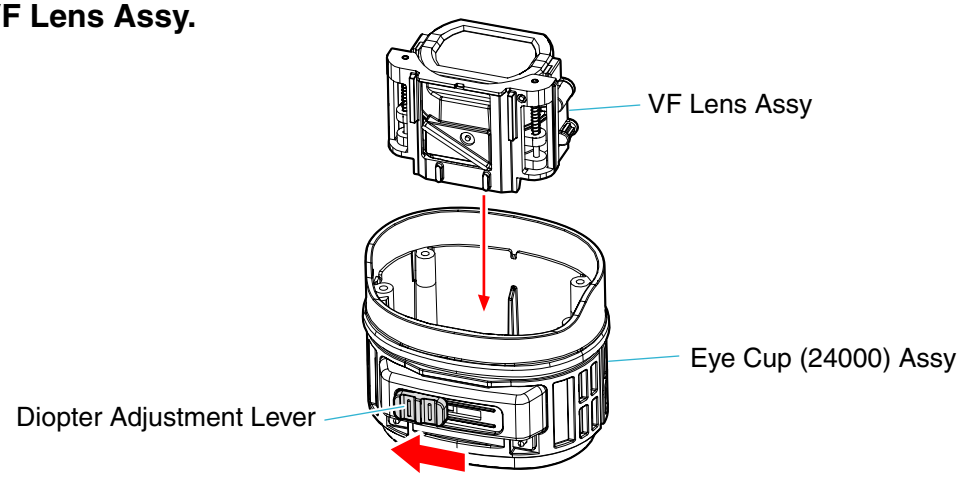
HELP07

Sticking standard of the Cushion (Mic)



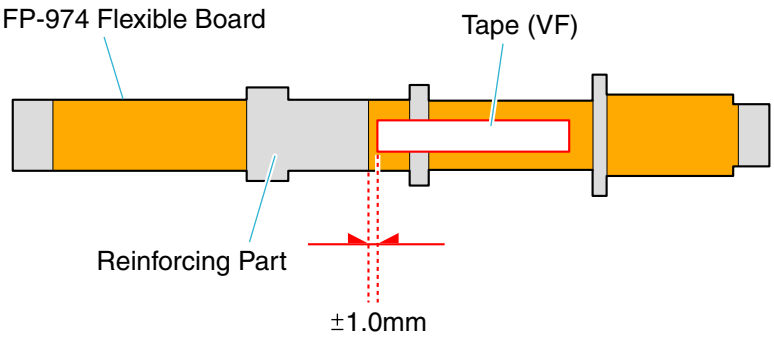
HELP08

Confirm the Diopter Adjustment Lever is on the left side when installing the VF Lens Assy.



HELP09

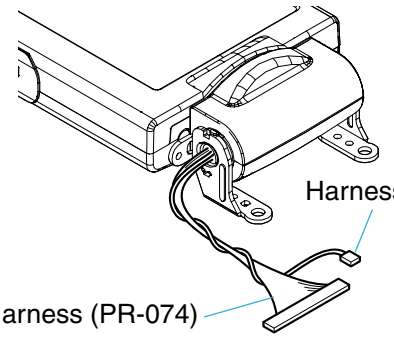
Sticking standard of the Tape (VF)

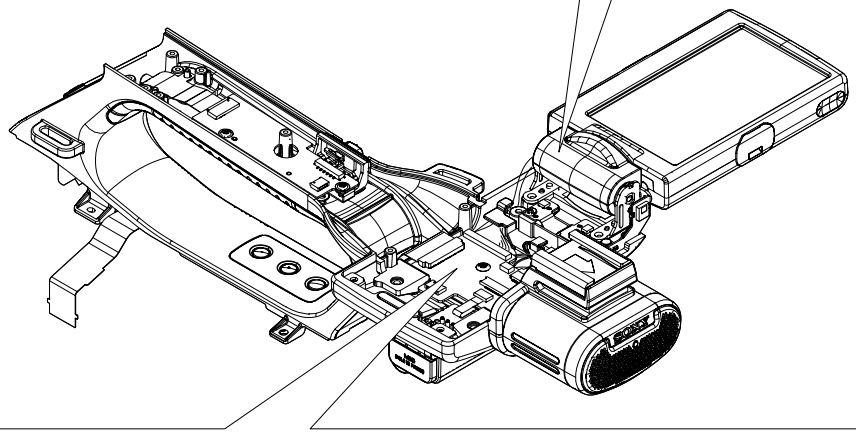


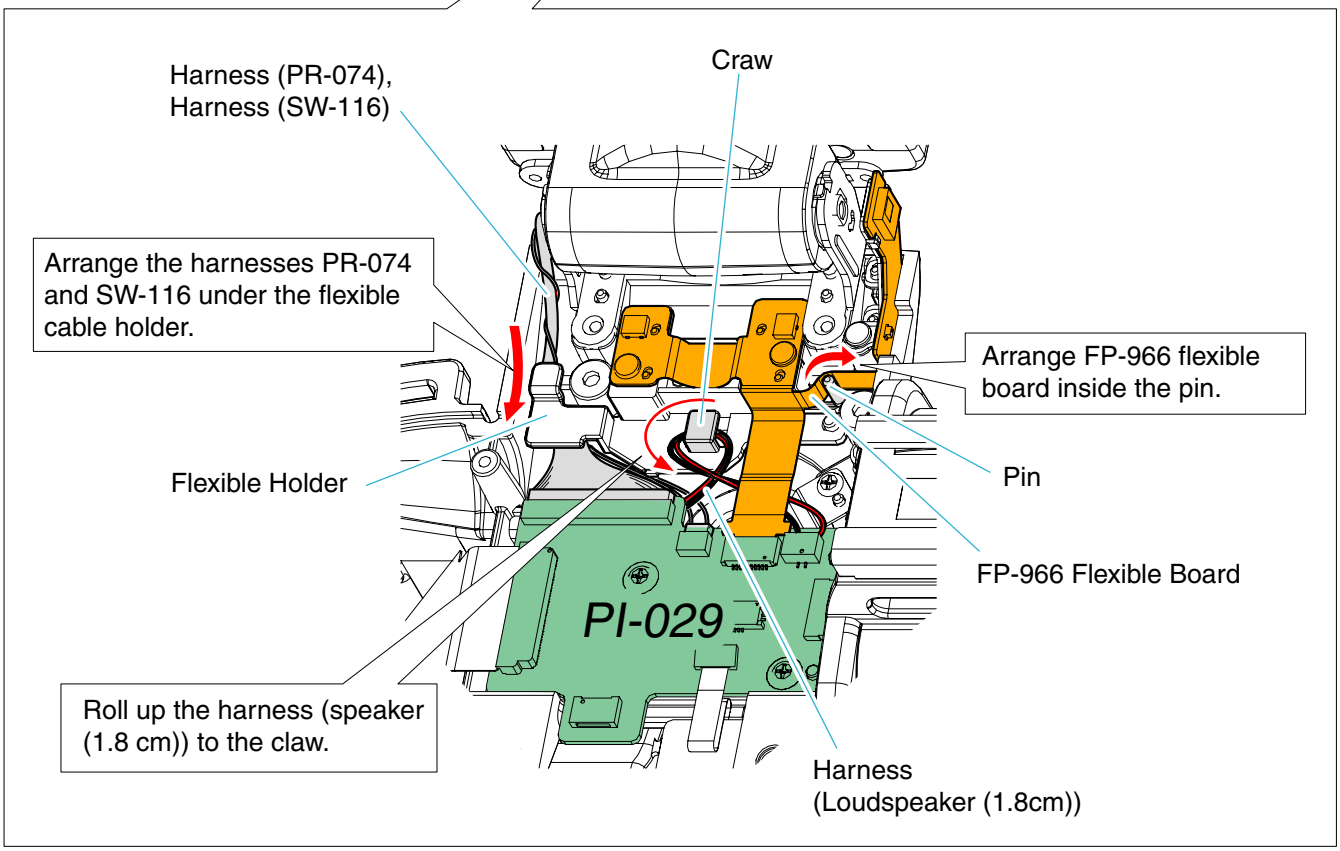
HELP10

How to arrange Harnesses and Flexible Board.

The Harness (SW-116) wrap around the Harness (PR-074).

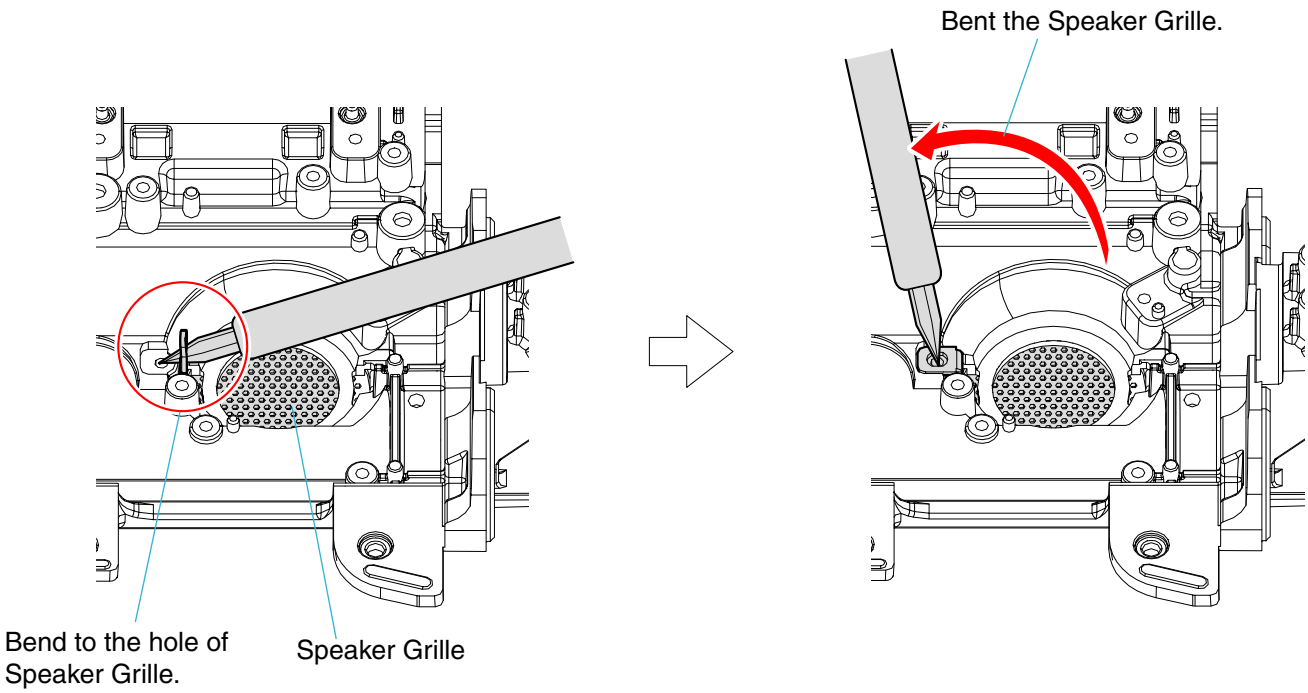






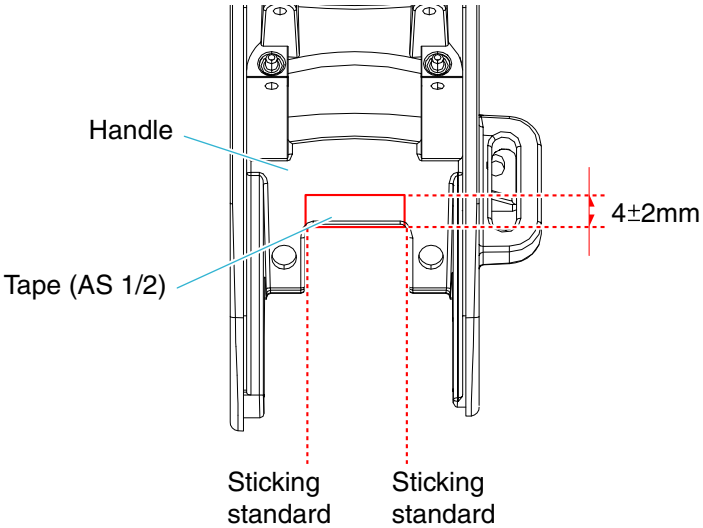
HELP11

How to bent the Speaker Grille.



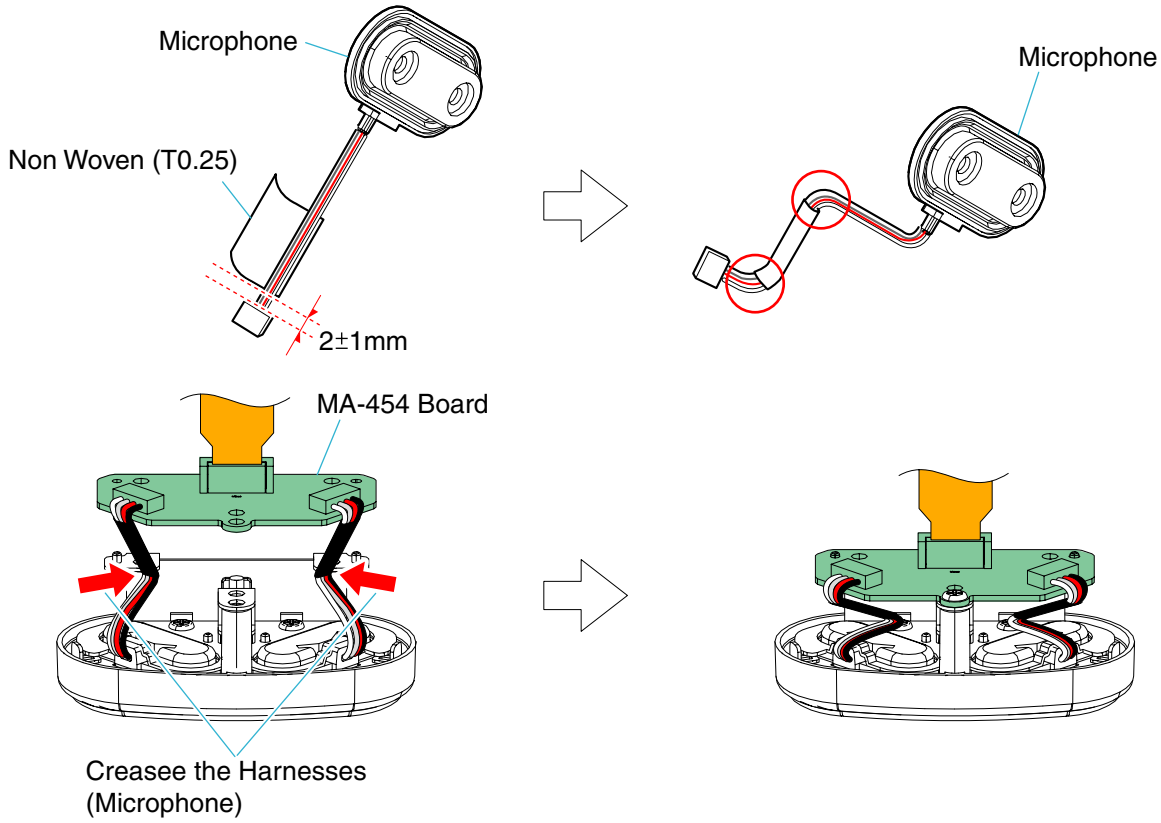
HELP12

Sticking standard of the Tape (AS 1/2)



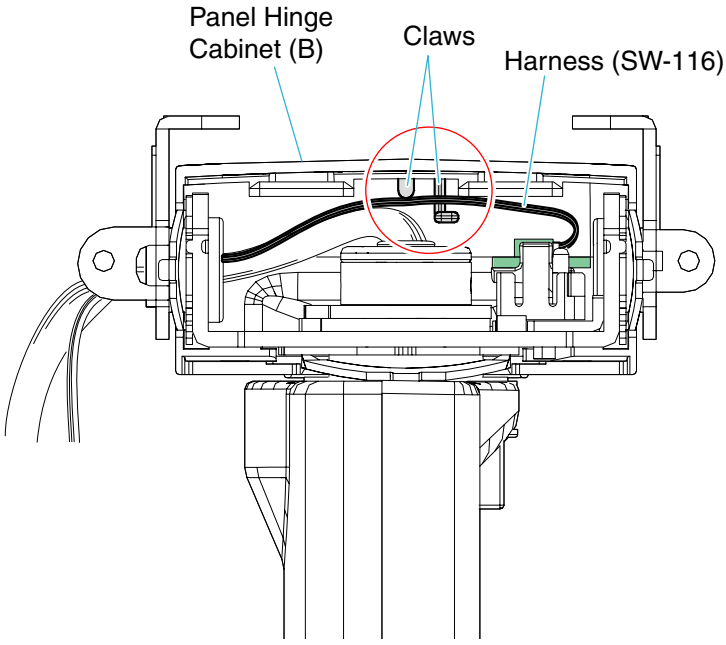
HELP13

Crease the harness (Microphone) two points as shown in the figure.



HELP14

How to arrange Harnesses (SW-116).



3. BLOCK DIAGRAMS

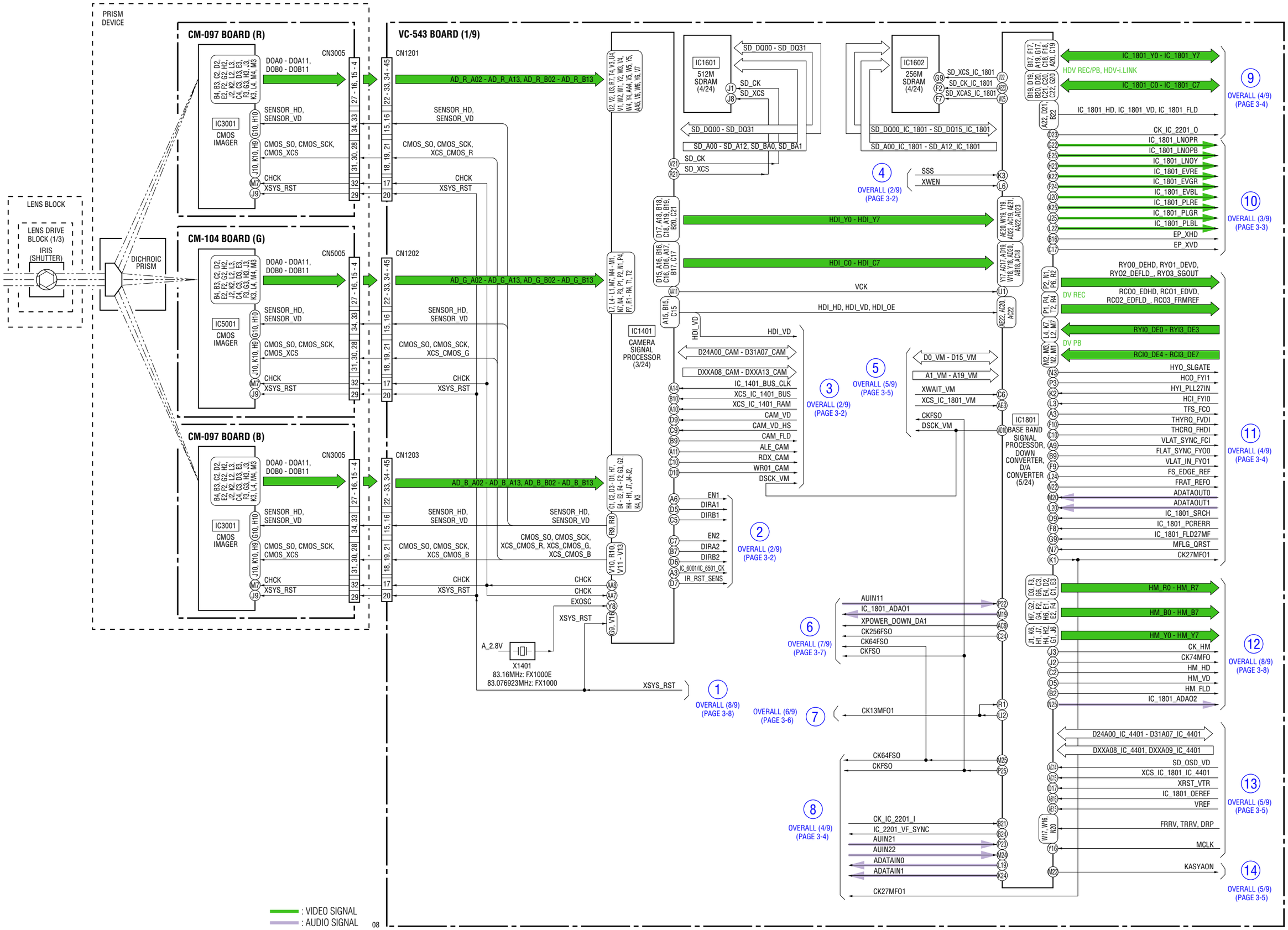
Link

- OVERALL BLOCK DIAGRAM (1/9)
- OVERALL BLOCK DIAGRAM (2/9)
- OVERALL BLOCK DIAGRAM (3/9)
- OVERALL BLOCK DIAGRAM (4/9)
- OVERALL BLOCK DIAGRAM (5/9)
- OVERALL BLOCK DIAGRAM (6/9)
- OVERALL BLOCK DIAGRAM (7/9)
- OVERALL BLOCK DIAGRAM (8/9)
- OVERALL BLOCK DIAGRAM (9/9)
- POWER BLOCK DIAGRAM (1/4)
- POWER BLOCK DIAGRAM (2/4)
- POWER BLOCK DIAGRAM (3/4)
- POWER BLOCK DIAGRAM (4/4)

3. BLOCK DIAGRAMS

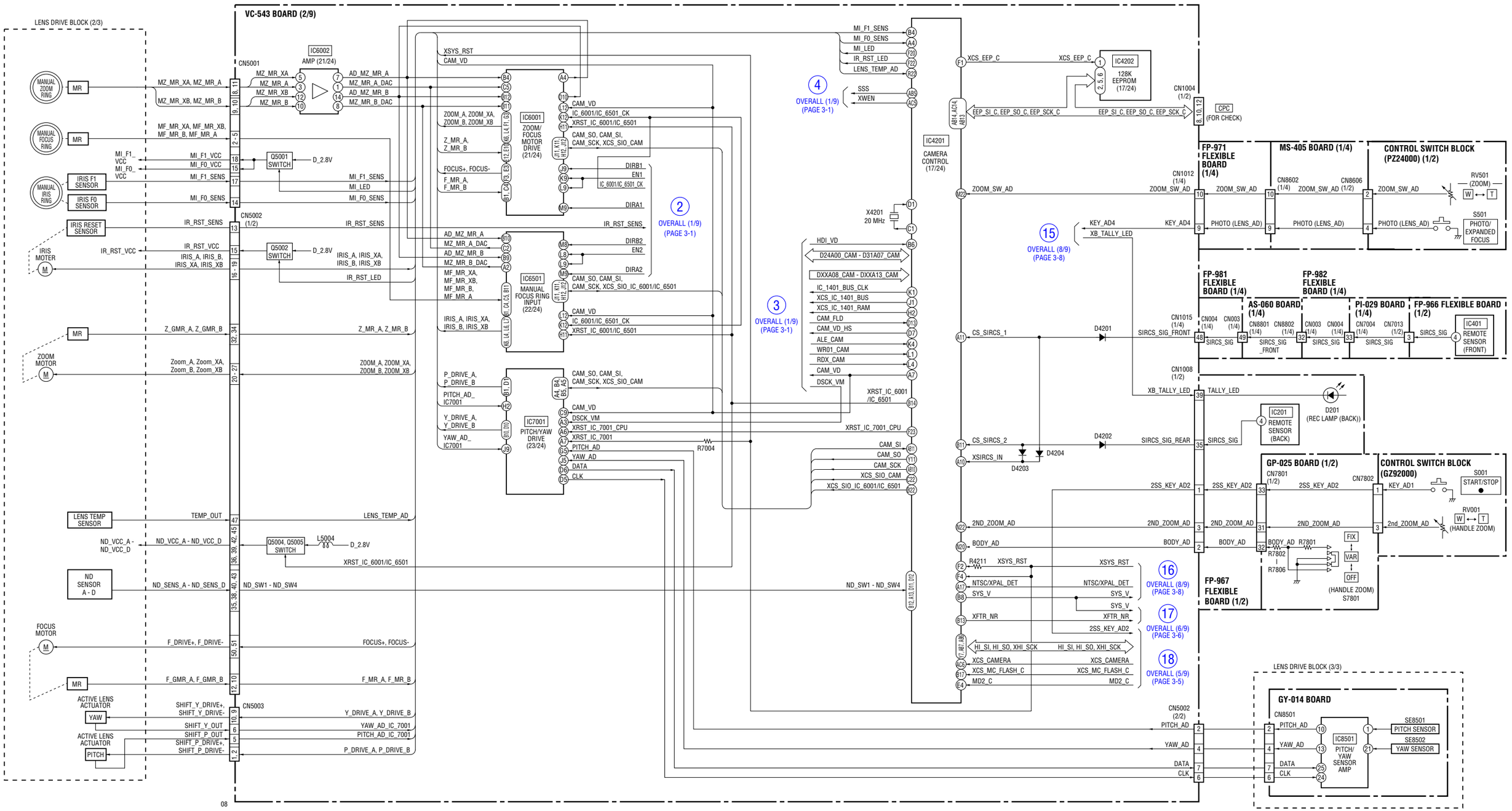
3-1. OVERALL BLOCK DIAGRAM (1/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



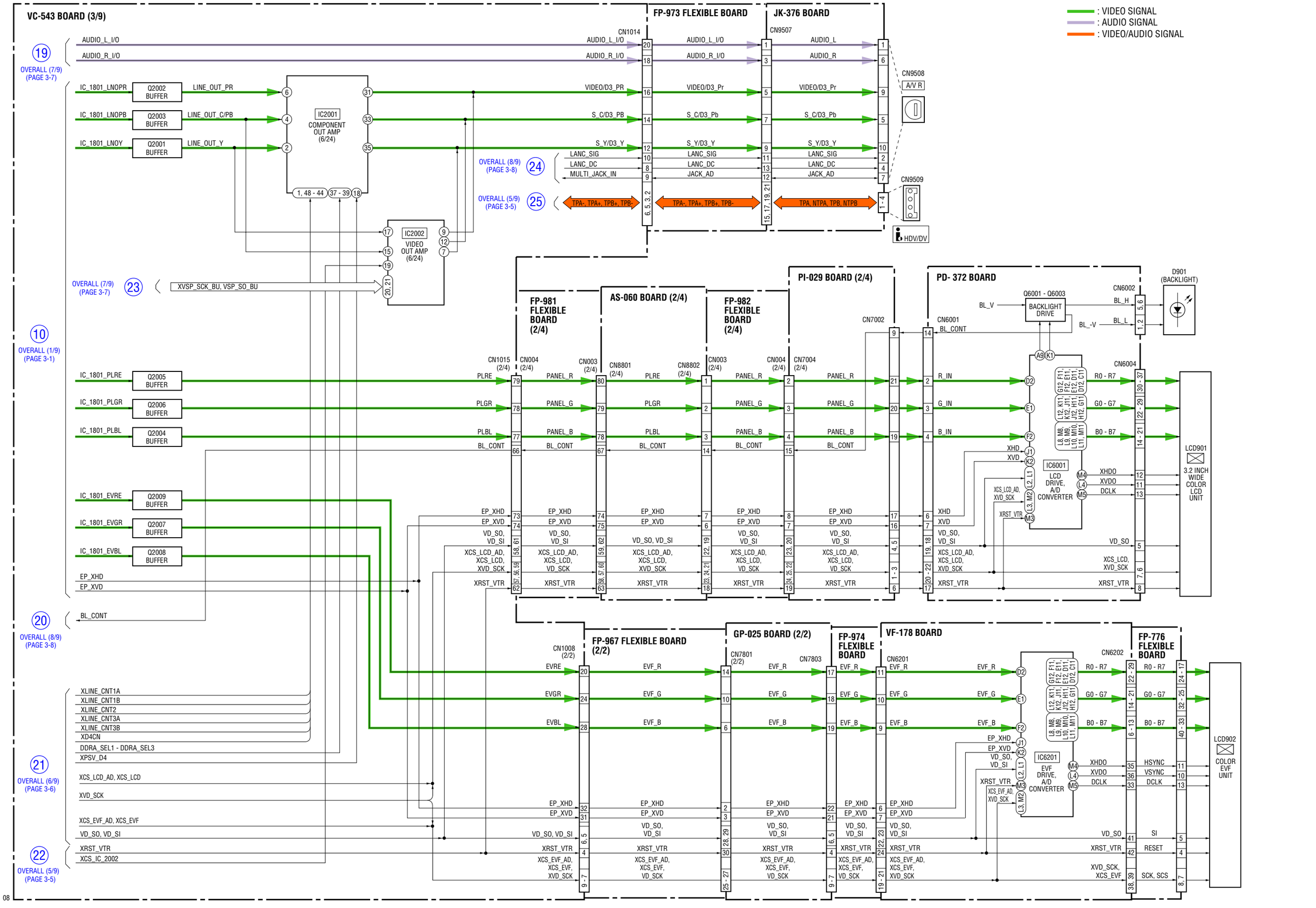
3-2. OVERALL BLOCK DIAGRAM (2/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



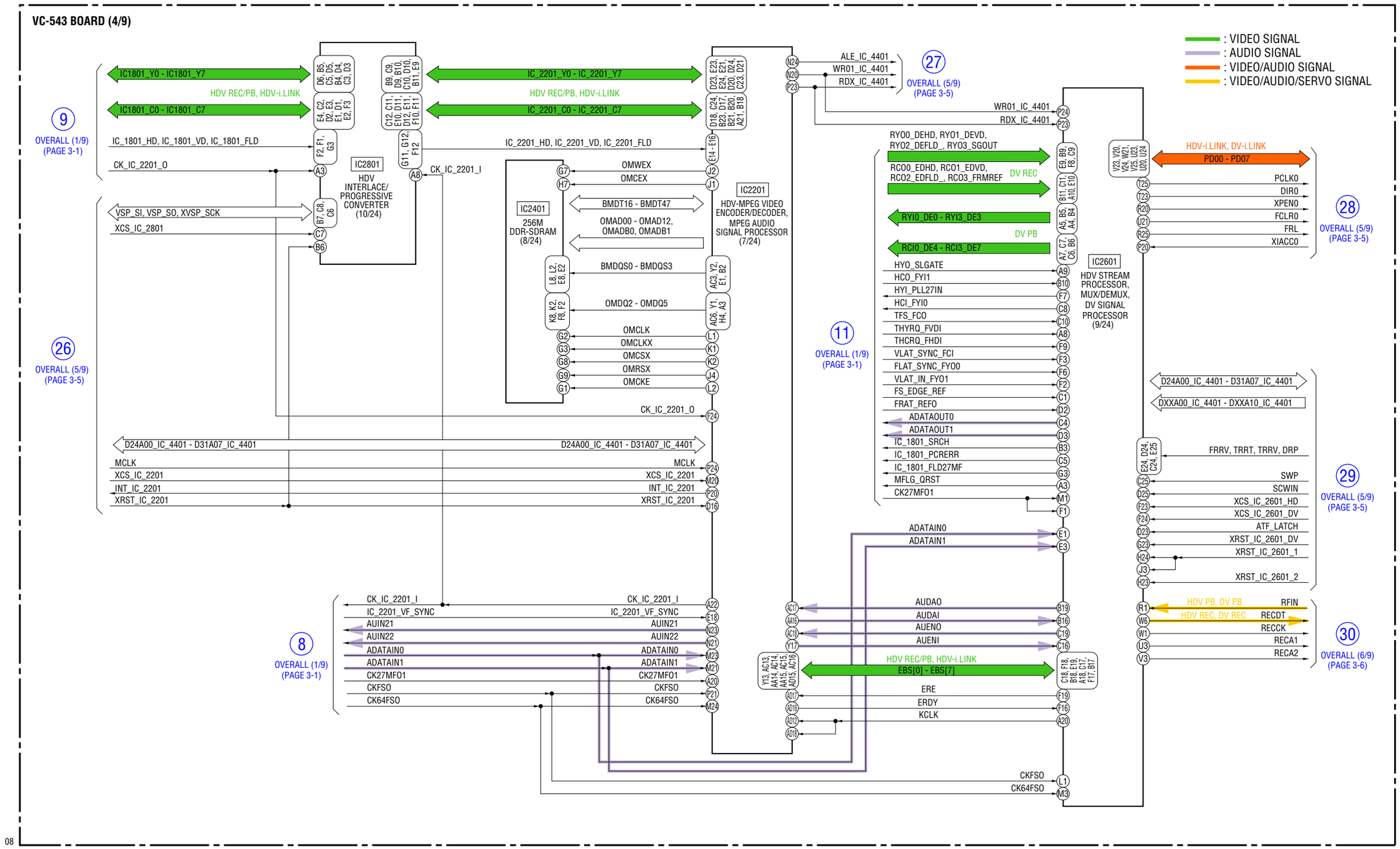
3-3. OVERALL BLOCK DIAGRAM (3/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3-4. OVERALL BLOCK DIAGRAM (4/9)

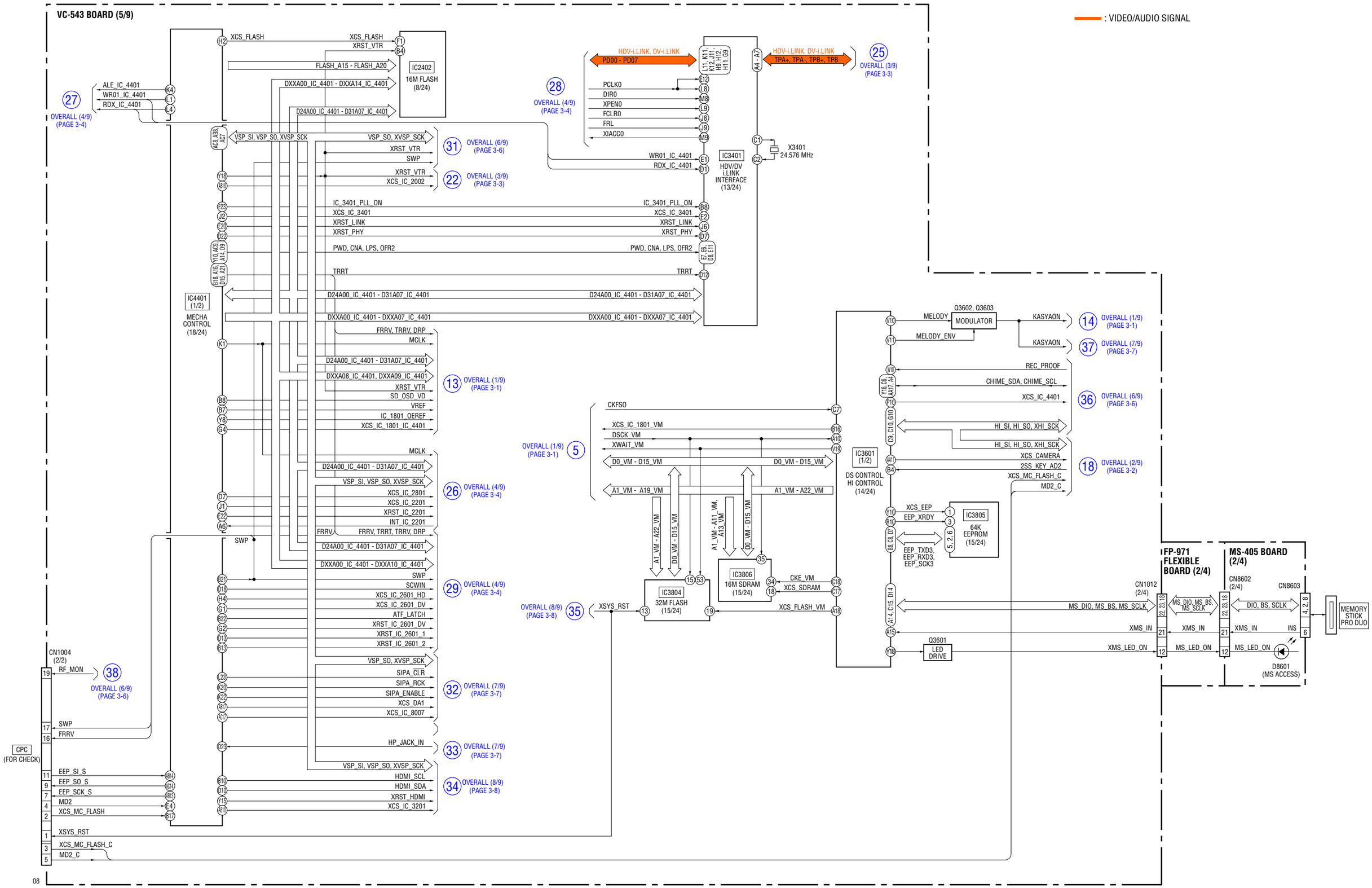
( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



08

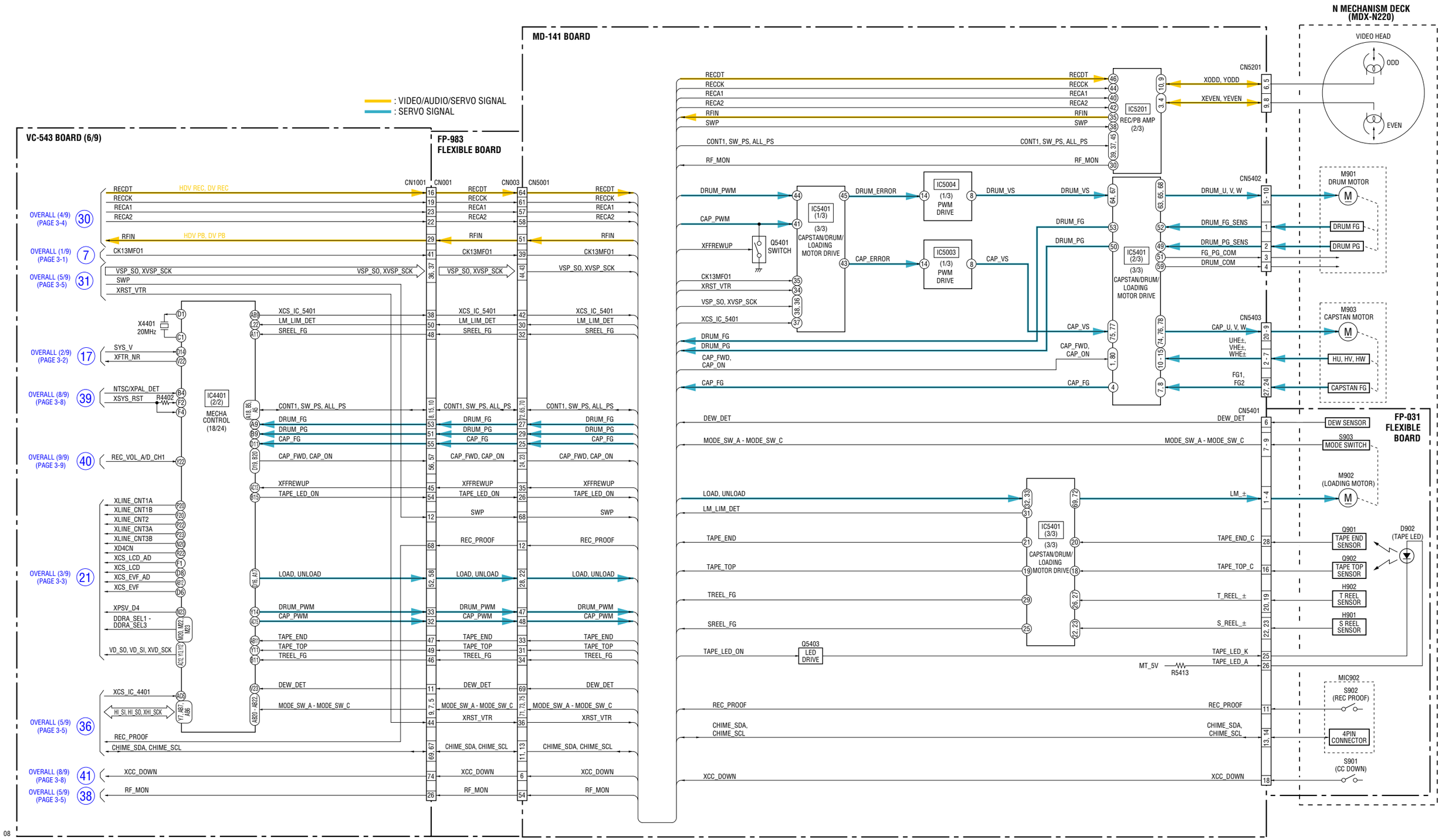
3-5. OVERALL BLOCK DIAGRAM (5/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



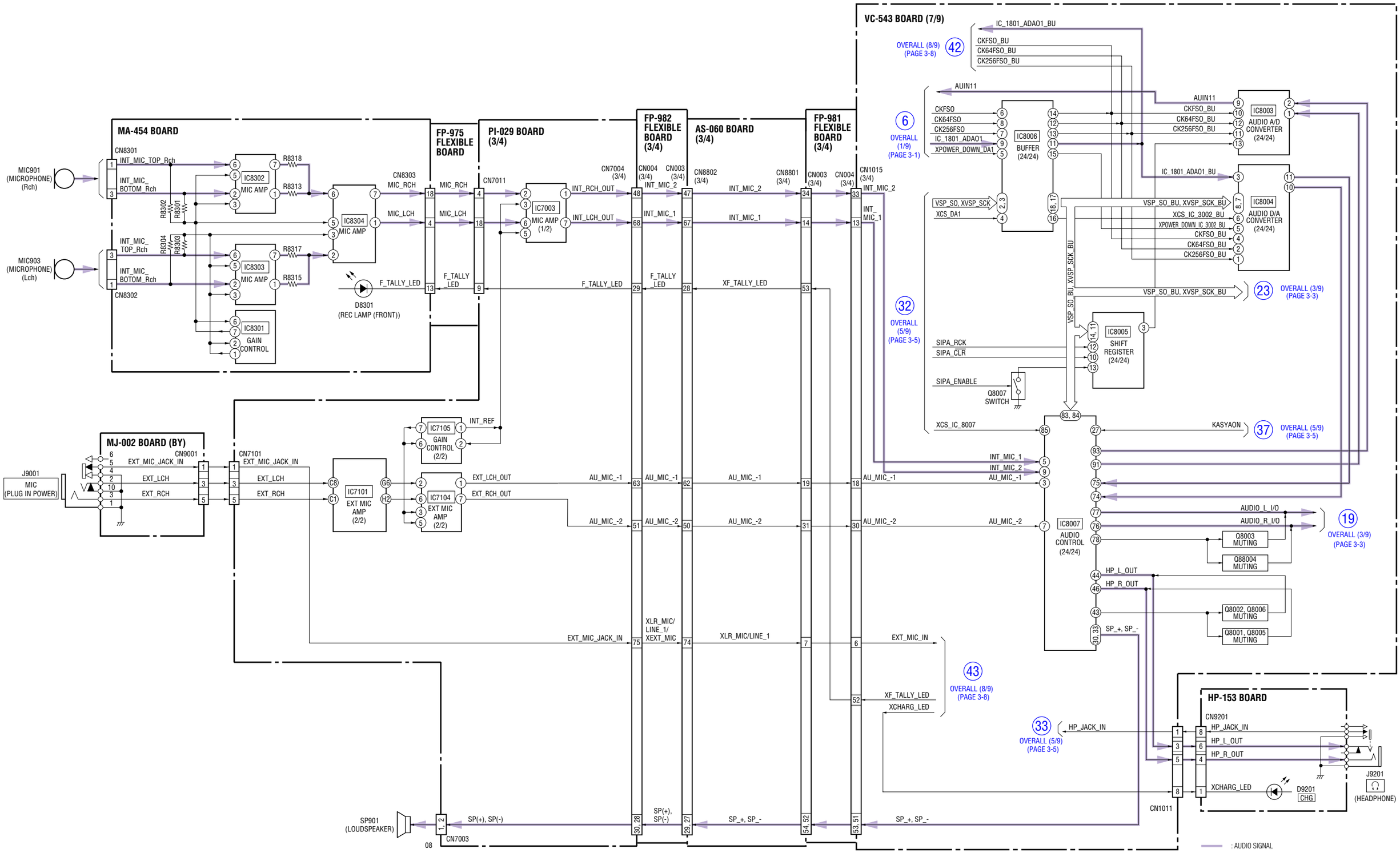
3-6. OVERALL BLOCK DIAGRAM (6/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



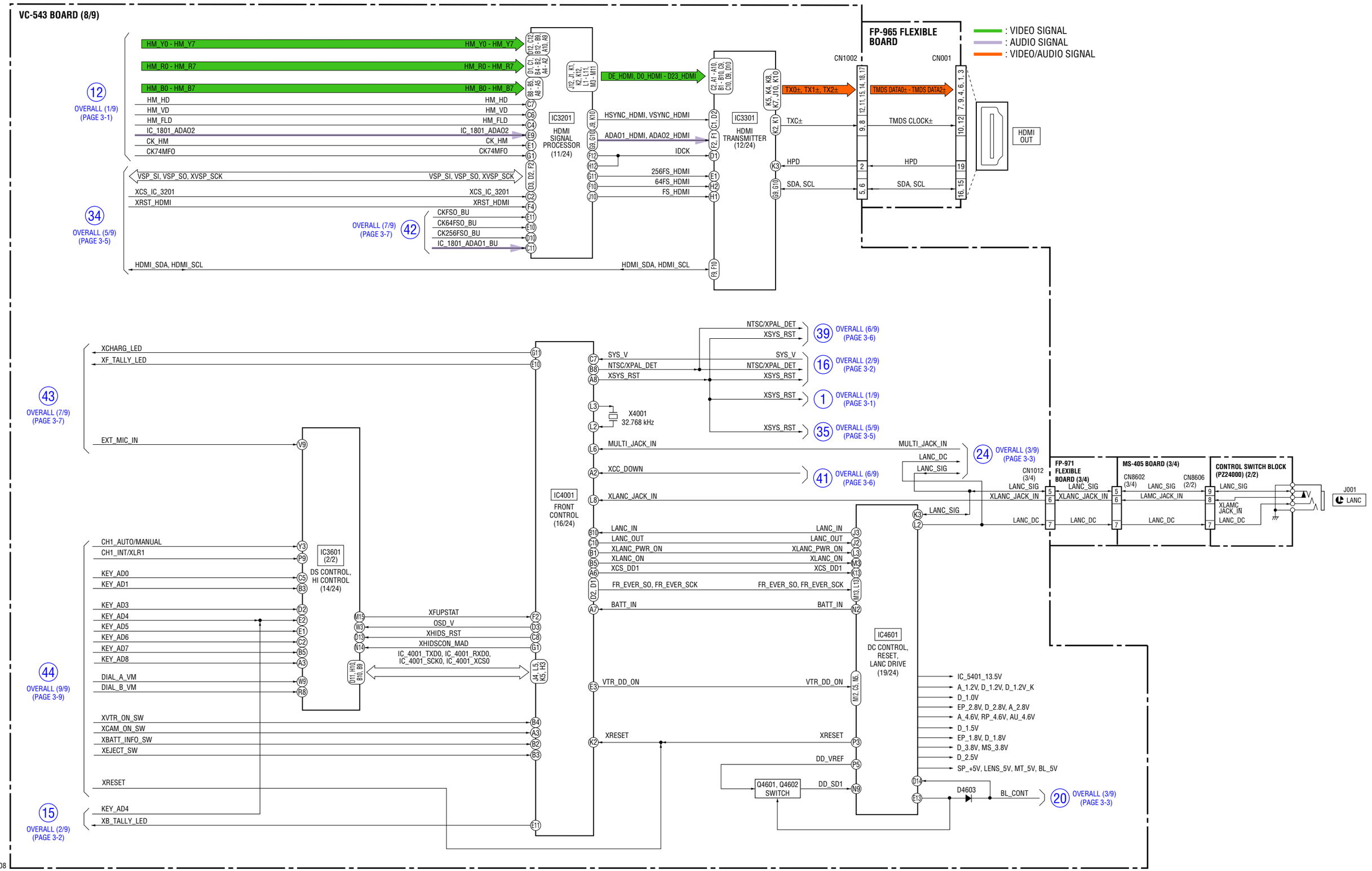
3-7. OVERALL BLOCK DIAGRAM (7/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3-8. OVERALL BLOCK DIAGRAM (8/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.

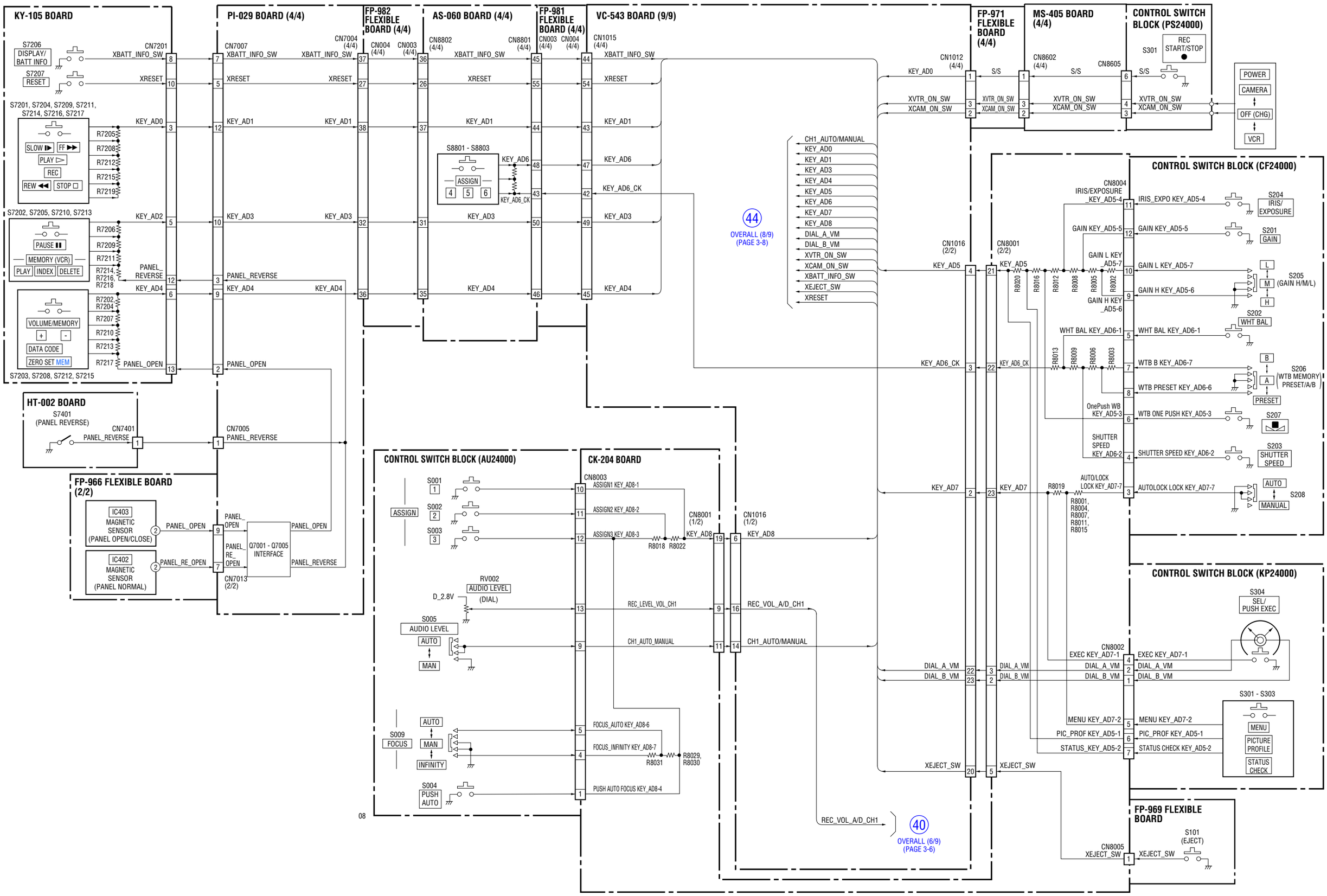


Ver. 1.1 2008.11

The changed portions from Ver. 1.0 are shown in blue.

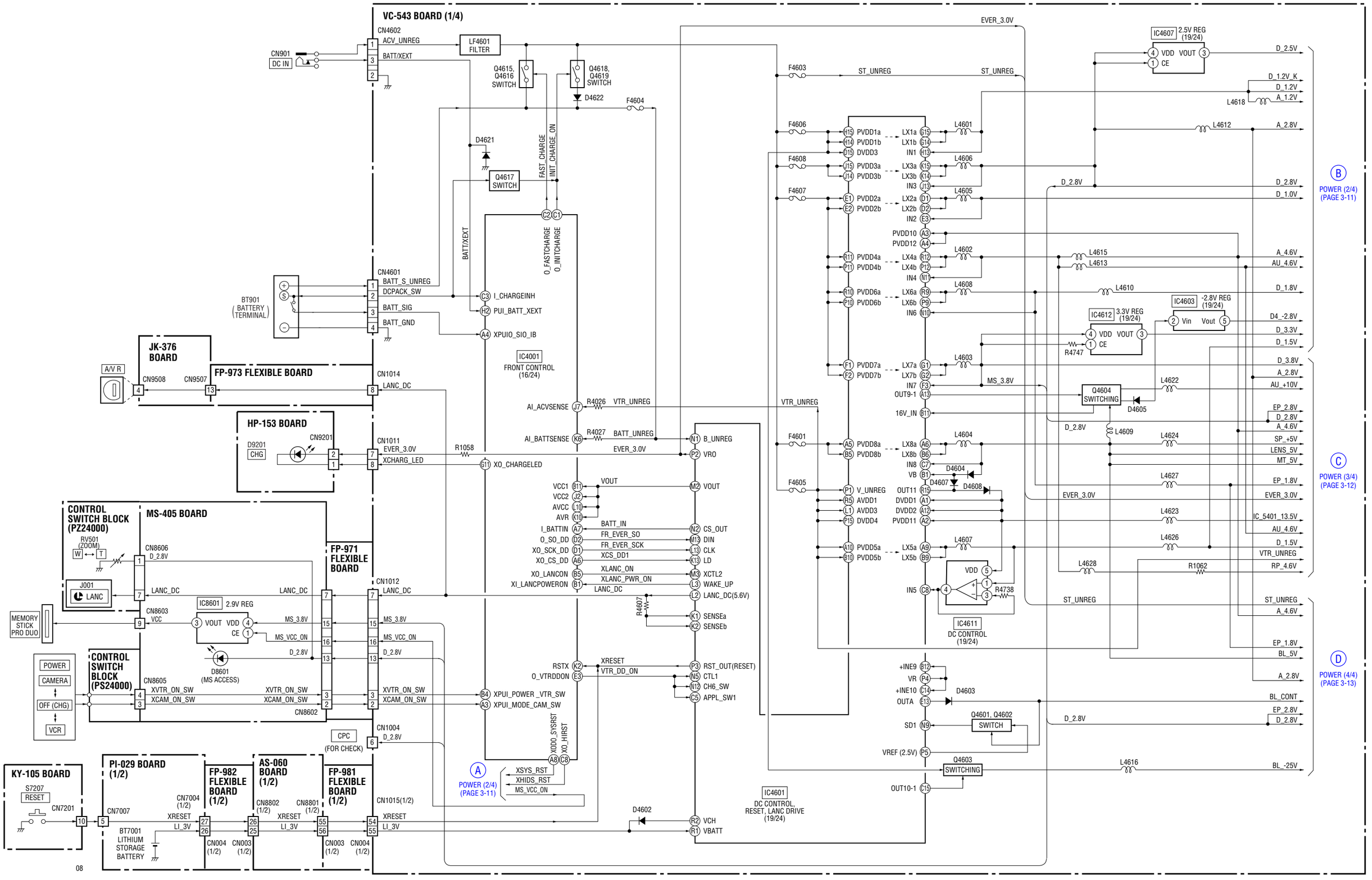
3-9. OVERALL BLOCK DIAGRAM (9/9)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



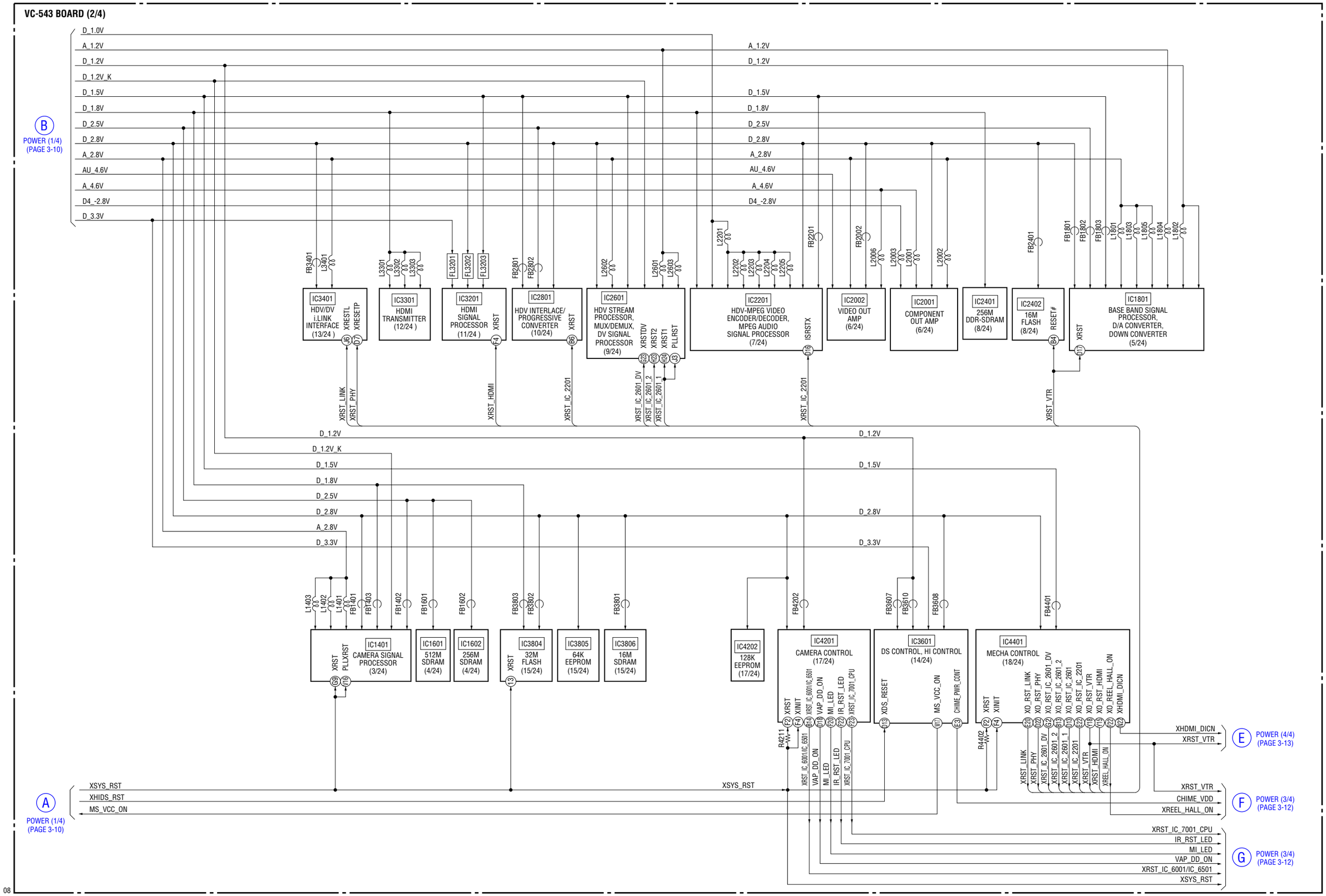
3-10. POWER BLOCK DIAGRAM (1/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



3-11. POWER BLOCK DIAGRAM (2/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.

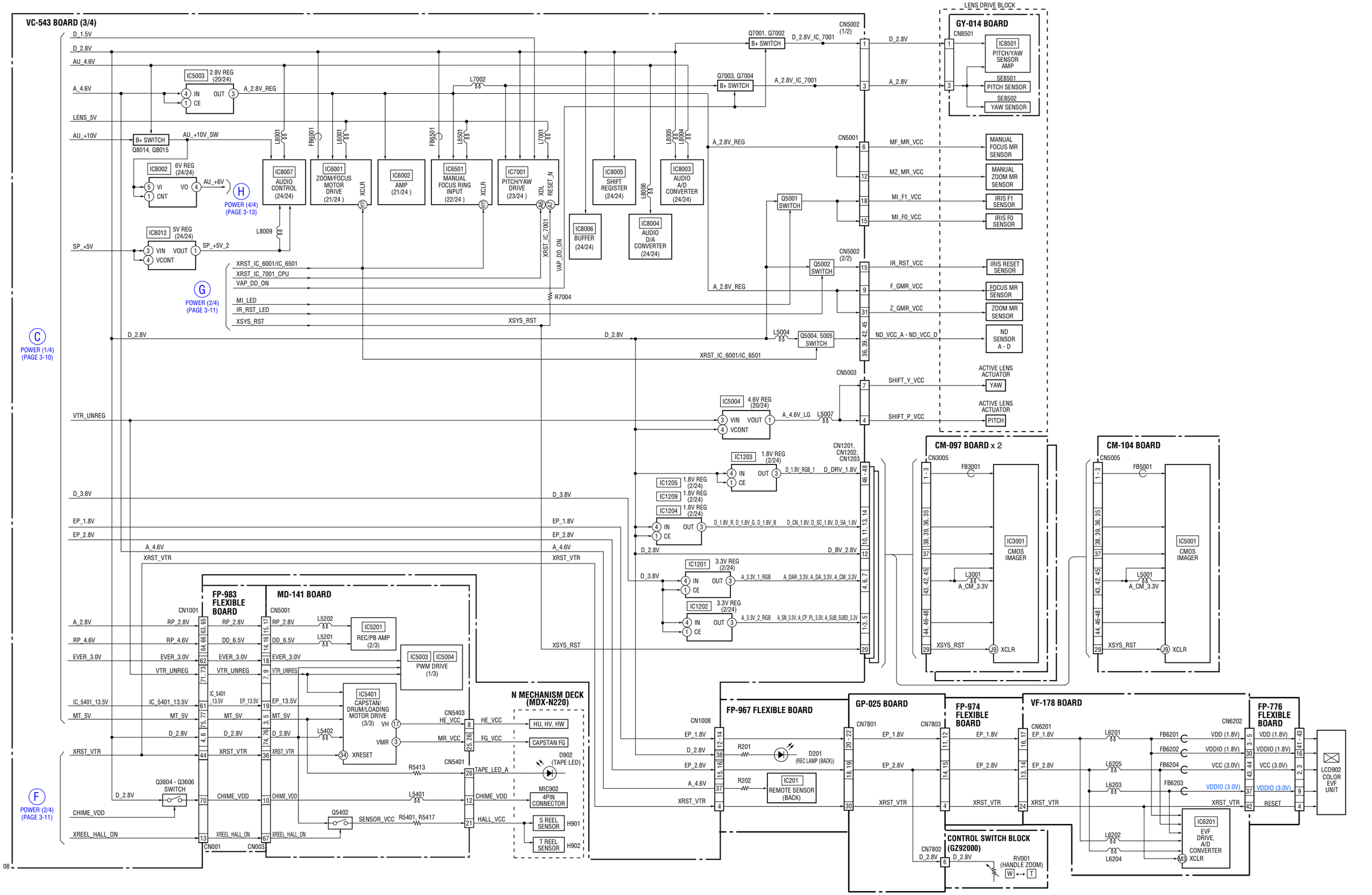


Ver. 1.1 2008.11

The changed portions from Ver. 1.0 are shown in blue.

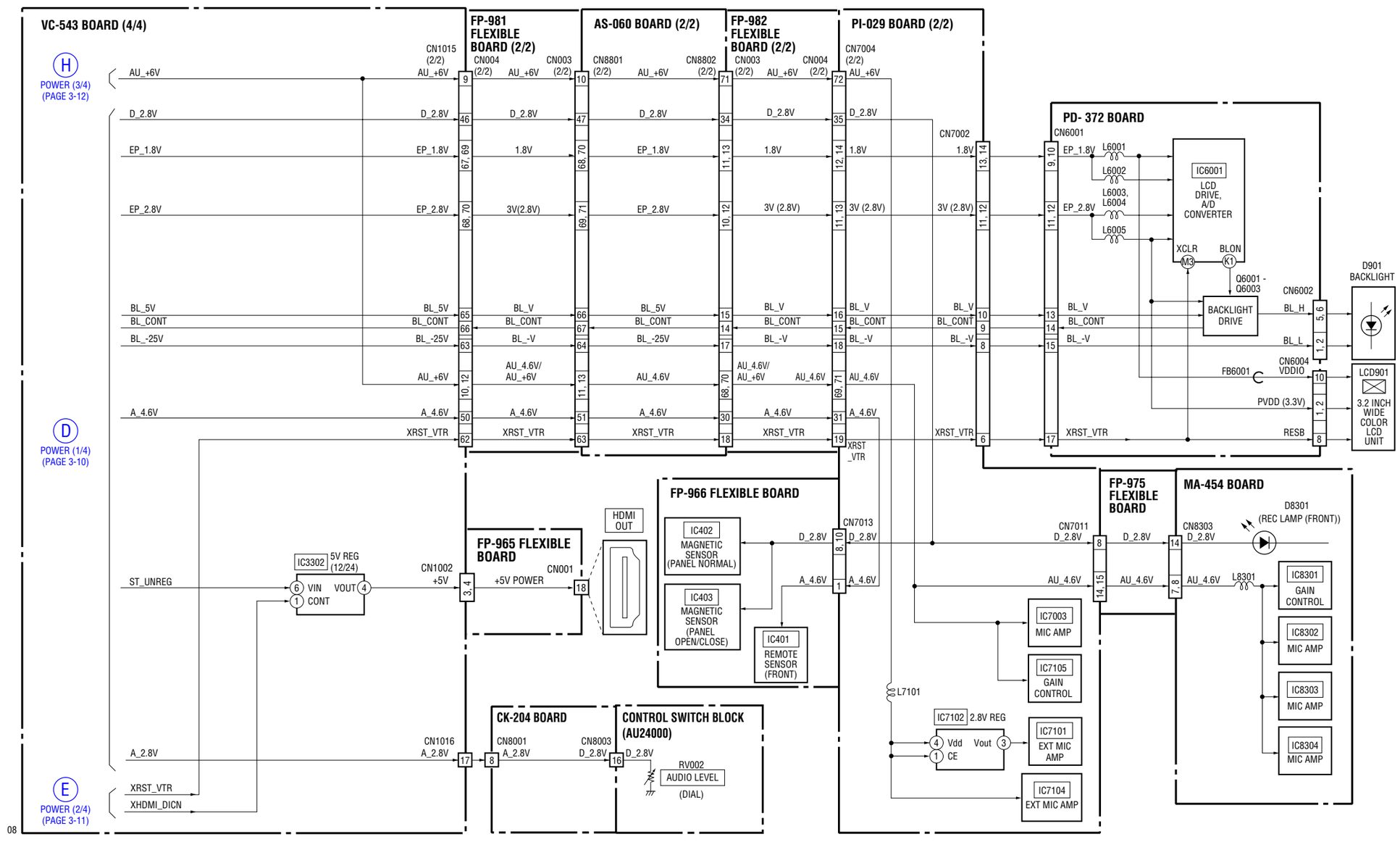
3-12. POWER BLOCK DIAGRAM (3/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



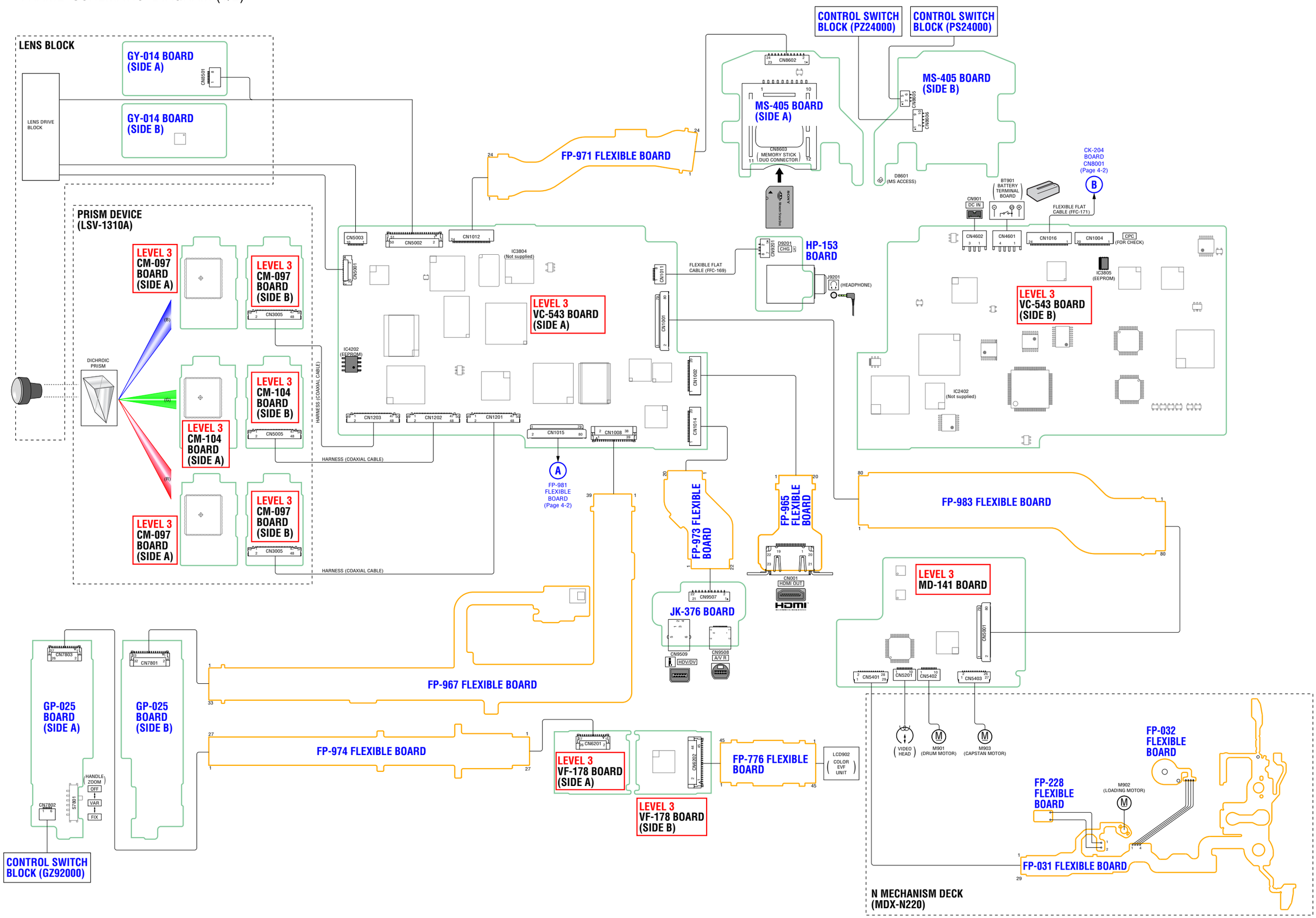
3-13. POWER BLOCK DIAGRAM (4/4)

( ) : Number in parenthesis ( ) indicates the division number of schematic diagram where the component is located.



4-1. FRAME SCHEMATIC DIAGRAM

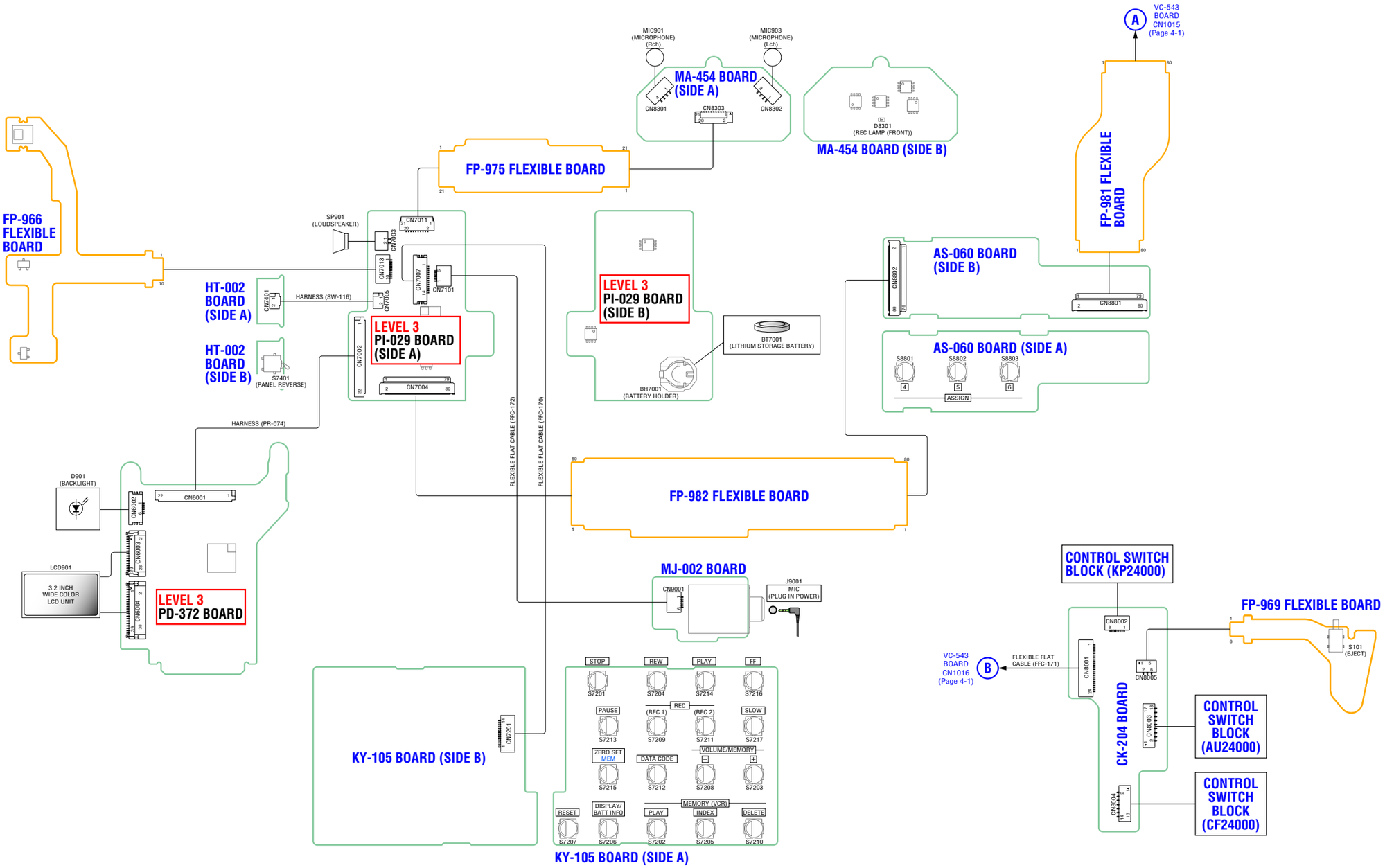
FRAME SCHEMATIC DIAGRAM (1/2)



Ver. 1.1 2008.11

The changed portions from
Ver. 1.0 are shown in blue.

FRAME SCHEMATIC DIAGRAM (2/2)



4-2. SCHEMATIC DIAGRAMS

Link

GY-014 BOARD (PITCH/YAW SENSOR AMP)	FP-969 FLEXIBLE BOARD (EJECT SWITCH)
AS-060 BOARD (VC-PI RELAY)	FP-971 FLEXIBLE BOARD (VC-MS CONNECTION)
CK-204 BOARD (CABINET (R) RELAY)	FP-973 FLEXIBLE BOADR (VC-JK CONNECTION)
GP-025 BOARD (VC-VF RELAY)	FP-974 FLEXIBLE BOARD (GP-VF CONNECTION)
HP-153 BOARD (HEADPHONES JACK)	FP-975 FLEXIBLE BOARD (PI-MA CONNECTION)
JK-376 BOARD (HDV/DV, A/V R CONNECTOR)	FP-981 FLEXIBLE BOARD (VC-AS CONNECTION)
KY-105 BOARD (CONTROL SWITCH)	FP-982 FLEXIBLE BOARD (AS-PI CONNECTION)
MA-454 BOARD (MIC AMP)	FP-983 FLEXIBLE BOARD (VC-MD CONNECTION)
MS-405 BOARD (MS CONNECTOR)	CONTROL SWITCH BLOCK (AU24000)
HT-002 BOARD (PANEL REVERSE DETECTION)	CONTROL SWITCH BLOCK (CF24000)
MJ-002 BOARD (MIC JACK)	CONTROL SWITCH BLOCK (GZ92000)
FP-776 FLEXIBLE BOARD (VF-EVF CONNECTION)	CONTROL SWITCH BLOCK (KP24000)
FP-966 FLEXIBLE BOARD (REMOTE SENSOR (FRONT), PANEL DETECT)	CONTROL SWITCH BLOCK (PS24000)
FP-967 FLEXIBLE BOARD (VC-GP CONNECTION, REMOTE SENSOR (BACK))	CONTROL SWITCH BLOCK (PZ24000)
FP-965 FLEXIBLE BOARD (HDMI CONNECTOR)	FP-031, FP-032, FP-228 FLEXIBLE BOARD (MECHANISM BLOCK)

COMMON NOTE FOR SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS (ENGLISH)

THIS NOTE IS COMMON FOR SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

(For schematic diagrams)

- All capacitors are in μF unless otherwise noted. pF : μμF. 50 V or less are not indicated except for electrolytics and tantalums.
- Chip resistors are 1/10 W unless otherwise noted. kΩ=1000 Ω, MΩ=1000 kΩ.
- Caution when replacing chip parts.
  New parts must be attached after removal of chip.
  Be careful not to heat the minus side of tantalum capacitor, Because it is damaged by the heat.
- Some chip part will be indicated as follows.

  Example C541 22U TA A — Kinds of capacitor / Case size
  L452 10UH 2520 — External dimensions (mm)
- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used.
  In such cases, the unused circuits may be indicated.
- Parts with ★ differ according to the model/destination.
  Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name
  XEDIT → $\overline{\text{EDIT}}$ PB/XREC → PB/$\overline{\text{REC}}$
- : non flammable resistor
- : fusible resistor
- : panel designation
- : B+ Line
- : B– Line
- : IN/OUT direction of (+,–) B LINE.
- : adjustment for repair.

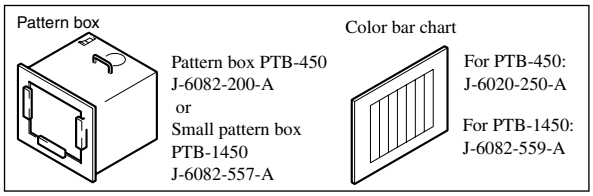
(Measuring conditions voltage and waveform)

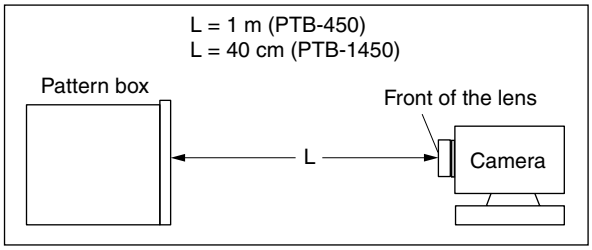
- Voltages and waveforms are measured between the measurement points and ground when camera shoots color bar chart of pattern box. They are reference values and reference waveforms.
  (VOM of DC 10 MΩ input impedance is used)
- Voltage values change depending upon input impedance of VOM used.)

Precautions for Replacement of Imager

- If the imager has been replaced, carry out all the adjustments for the camera section.
- As the imager may be damaged by static electricity from its structure, handle it carefully like for the MOS IC.
  In addition, ensure that the receiver is not covered with dusts nor exposed to strong light.

1. Connection





2. Adjust the distance so that the output waveform of Fig. a and the Fig. b can be obtain.

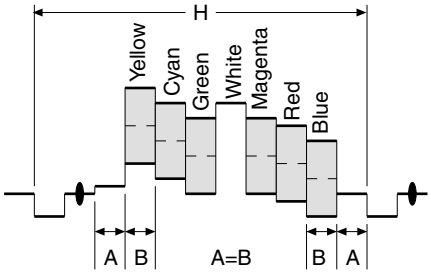


Fig. a (Video output terminal output waveform)

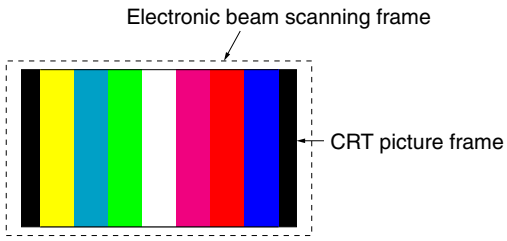


Fig.b (Picture on monitor TV)

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifie.

(JAPANESE)

回路図共通ノート
（他に必要なノートは各ブロックに記載してあります）
【回路図ノート】

- ケミコン，タンタルを除くコンデンサで，耐圧50V以下のものはその耐圧を省略。単位はすべてμF（pはpF）。
- チップ抵抗で指示のないものは，1／10W以下。
  kΩ＝1000Ω，MΩ＝1000kΩ
- チップ部品交換時の注意
  取り外した部品は再使用せず，未使用の部品をご使用ください。
  タンタルコンデンサのマイナス側は熱に弱いため注意してください。
- チップ部品には下記のように表示したものがあります。

例	C 541	L 452
	22U	10UH
	TA　A	2520
	↑　↑	↑
	種類　ケースサイズ	外形寸法（mm）

- 抵抗，コンデンサ，ICなど定数にXXがあるものは，使用していない事を示しています。このため，使用していない回路が記載されている事があります。
- ★印のある部品は，機種などにより異なりますので機能別マウント一覧表を参照してください。
- 可変抵抗と半固定抵抗で，B特性の表示を省略。
- 信号名表記について，下記のような場合があります。
  XEDIT → $\overline{\text{EDIT}}$　　PB/XREC → PB/$\overline{\text{REC}}$
- は不燃性抵抗。
- はヒューズ抵抗。
- はパネル表示名称。
- はB＋ライン。
- はB－ライン。
- はBライン（＋，－）の入出力方向を示す。
- は調整名称。

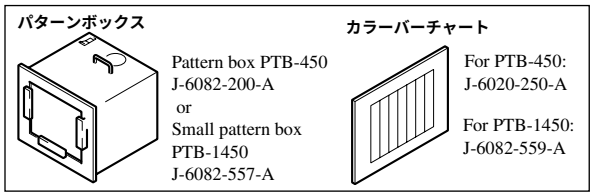
【電圧・波形測定条件ノート】

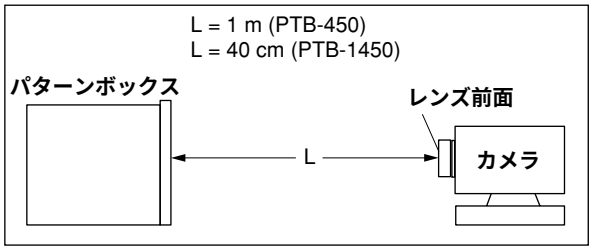
- 電圧値及び信号波形はパターンボックスのカラーバーチャートを被写体としたときの測定点対アース間の参考値。
  （デジタルマルチメータ；入力インピーダンス　DC10MΩ使用）
- 使用テスタの入力インピーダンスにより電圧値が多少異なります。

イメージャ交換時の注意

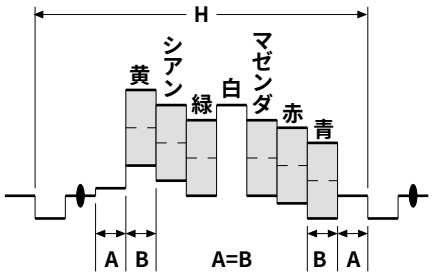
- イメージャを交換した場合は，カメラ部の全調整を行ってください。
- イメージャは構造上，静電気により破壊される恐れがあるため，MOS ICと同様に注意して取り扱ってください。
  また，受光部にはゴミの付着，および強い光がはいることのないように注意してください。

1. 接続図

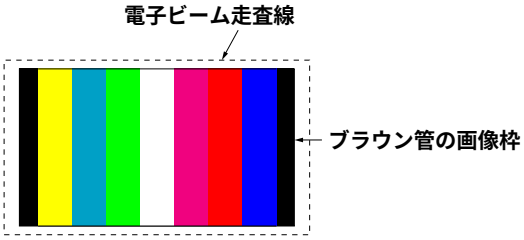




2. 図a及び図bの波形が得られるように画枠調整して下さい。



図a（映像入出力端子出力波形）

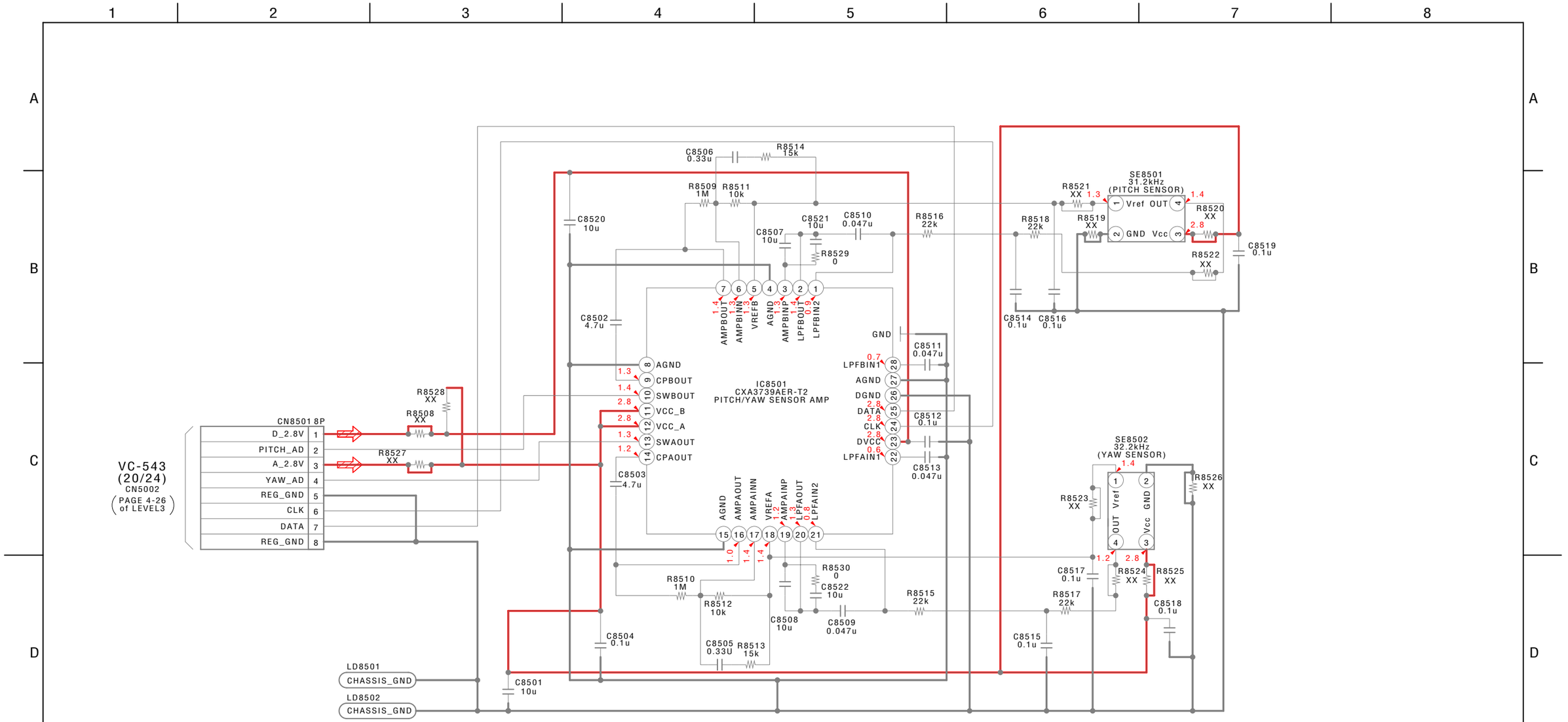


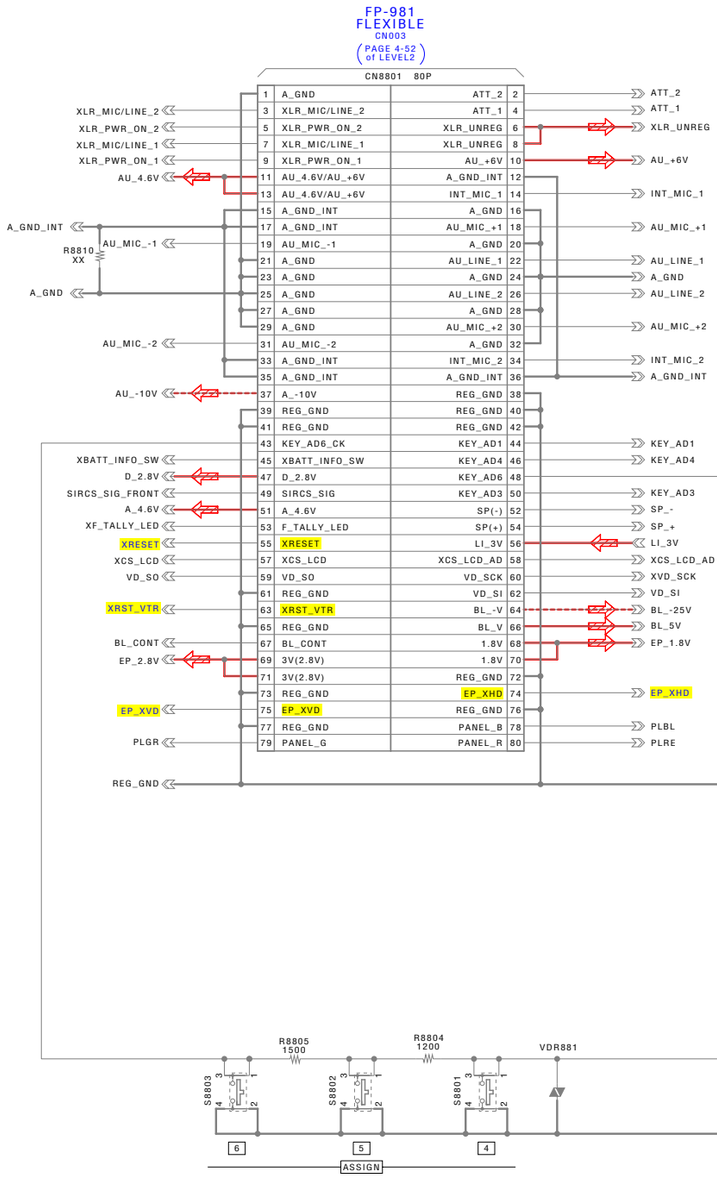
図b（テレビモニタの映像）

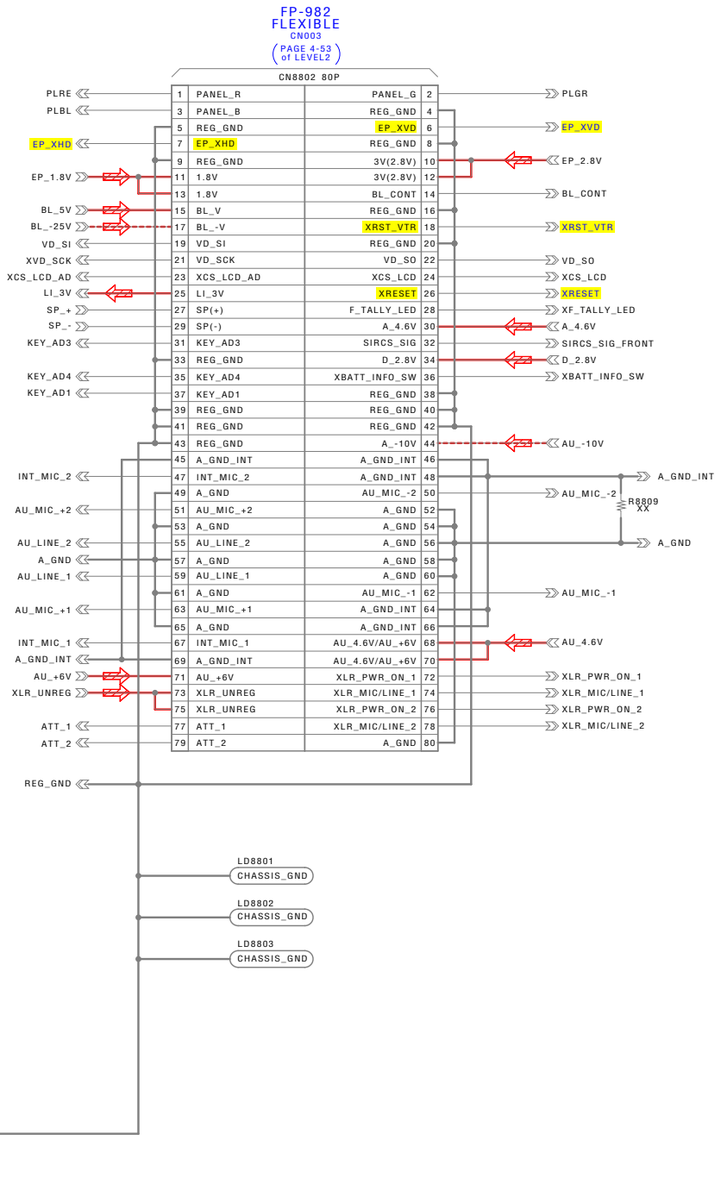
⚠印の部品，または⚠印付きの点線で囲まれた部品は，安全性を維持するために重要な部品です。
従って交換時は，必ず指定の部品を使用して下さい。

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定して下さい。

Schematic diagrams of the CM-097, CM-104, VC-543, PI-029, PD-372, VF-178 and MD-141 boards are not shown. Pages 4-5 to 4-37 are not shown.


1
2
3
4
5
6
7
8
A
B
C
D
E
F
VC-543
(20/24)
CN5002
(PAGE 4-26
of LEVEL3)
CN8501 8P
D_2.8V 1
PITCH_AD 2
A_2.8V 3
YAW_AD 4
REG_GND 5
CLK 6
DATA 7
REG_GND 8
R8528 XX
R8508 XX
R8527 XX
C8506 0.33u
R8514 15k
R8509 1M
R8511 10k
C8520 10u
C8521 10u
C8510 0.047u
R8516 22k
C8507 10u
R8529 0
C8502 4.7u
C8503 4.7u
IC8501
CXA3739AER-T2
PITCH/YAW SENSOR AMP
AMPBOUT
AMPBINN
VREFB
AGND
AMPBINP
LPFBOUT
LPFBIN2
AGND
CPBOUT
SWBOUT
VCC_B
VCC_A
SWAOUT
CPAOUT
LPFBIN1
AGND
DGND
DATA
CLK
DVCC
LPFAIN1
GND
C8511 0.047u
C8512 0.1u
C8513 0.047u
AGND
AMPAOUT
AMPAINN
VREFA
AMPAINP
LPFAOUT
LPFAIN2
R8510 1M
R8512 10k
R8530 0
C8522 10u
C8508 10u
C8509 0.047u
R8515 22k
C8504 0.1u
C8505 0.33U
R8513 15k
C8501 10u
LD8501
CHASSIS_GND
LD8502
CHASSIS_GND
SE8501
31.2kHz
(PITCH SENSOR)
Vref OUT
GND Vcc
R8521 XX
R8520 XX
R8519 XX
R8518 22k
R8522 XX
C8519 0.1u
C8514 0.1u
C8516 0.1u
SE8502
32.2kHz
(YAW SENSOR)
Vref GND
OUT Vcc
R8523 XX
R8526 XX
C8517 0.1u
R8524 XX
R8525 XX
C8518 0.1u
R8517 22k
C8515 0.1u
GY-014 BOARD
PITCH/YAW SENSOR AMP
XX MARK:NO MOUNT
NO MARK:REC/PB MODE
08

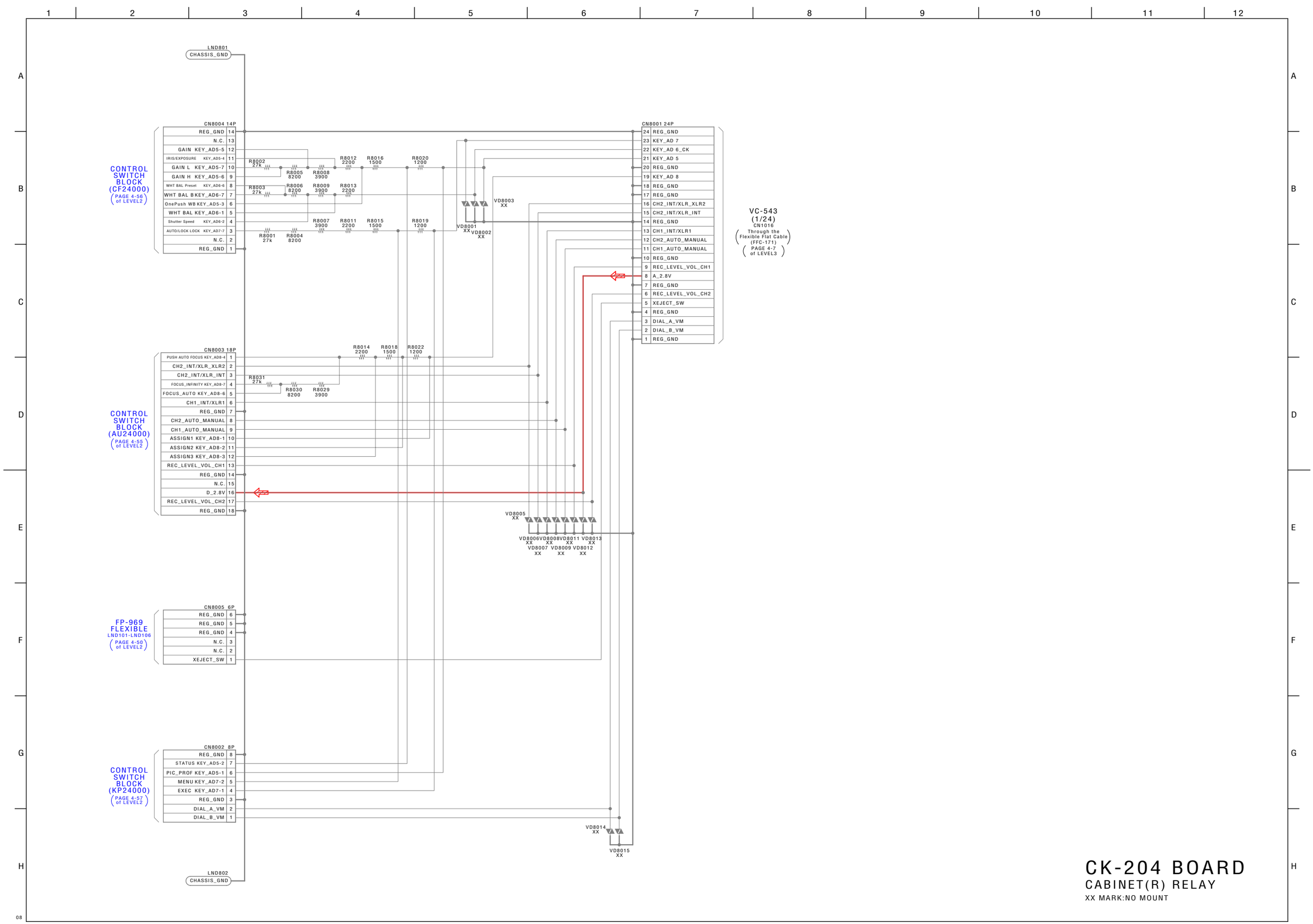


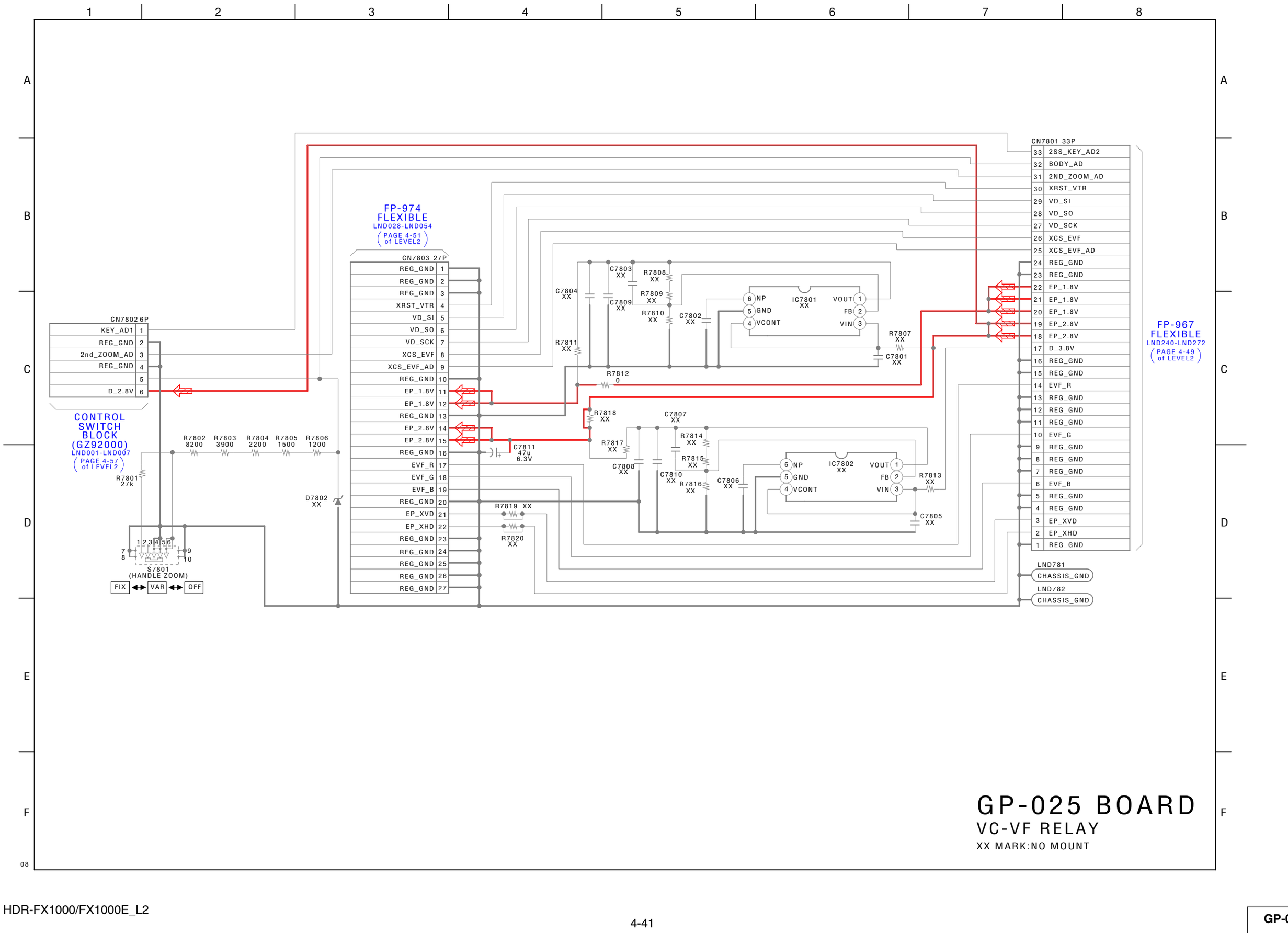


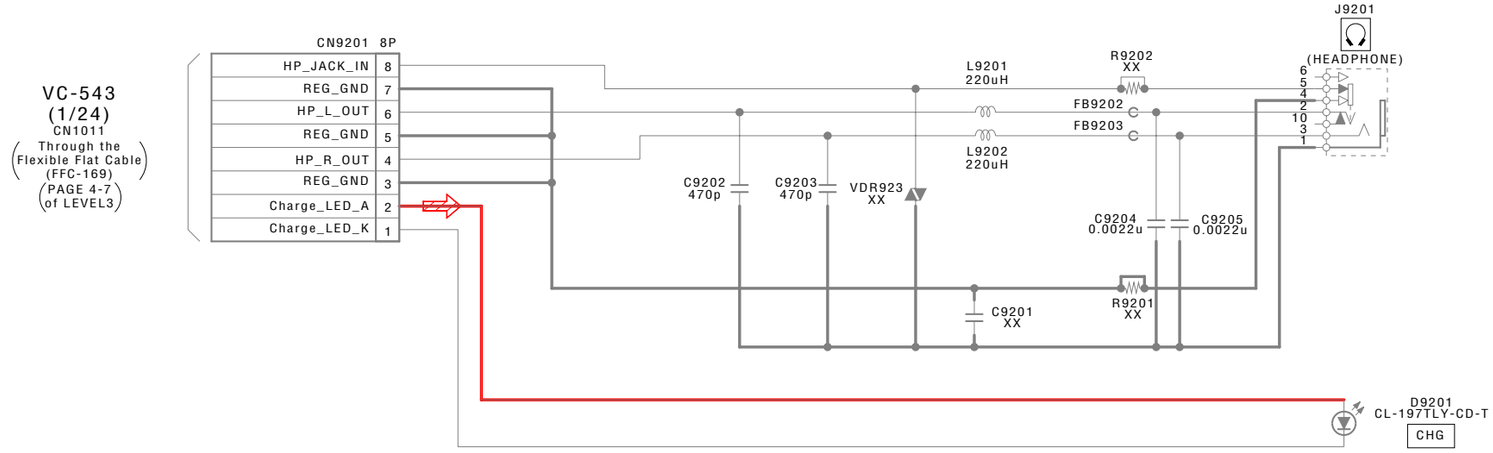
AS-060 BOARD

VC-PI RELAY

XX MARK:NO MOUNT


LND801
CHASSIS_GND
CN8004 14P
REG_GND 14
N.C. 13
GAIN KEY_AD5-5 12
IRIS/EXPOSURE KEY_AD5-4 11
GAIN L KEY_AD5-7 10
GAIN H KEY_AD5-6 9
WHT BAL Preset KEY_AD6-6 8
WHT BAL B KEY_AD6-7 7
OnePush WB KEY_AD5-3 6
WHT BAL KEY_AD6-1 5
Shutter Speed KEY_AD6-2 4
AUTO/LOCK LOCK KEY_AD7-7 3
N.C. 2
REG_GND 1
CONTROL SWITCH BLOCK (CF24000)
PAGE 4-56 of LEVEL2
R8002 27k
R8003 27k
R8001 27k
R8005 8200
R8006 8200
R8004 8200
R8008 3900
R8009 3900
R8007 3900
R8012 2200
R8013 2200
R8011 2200
R8016 1500
R8015 1500
R8020 1200
R8019 1200
VD8001 XX
VD8002 XX
VD8003 XX
CN8001 24P
24 REG_GND
23 KEY_AD 7
22 KEY_AD 6_CK
21 KEY_AD 5
20 REG_GND
19 KEY_AD 8
18 REG_GND
17 REG_GND
16 CH2_INT/XLR_XLR2
15 CH2_INT/XLR_INT
14 REG_GND
13 CH1_INT/XLR1
12 CH2_AUTO_MANUAL
11 CH1_AUTO_MANUAL
10 REG_GND
9 REC_LEVEL_VOL_CH1
8 A_2.8V
7 REG_GND
6 REC_LEVEL_VOL_CH2
5 XEJECT_SW
4 REG_GND
3 DIAL_A_VM
2 DIAL_B_VM
1 REG_GND
VC-543 (1/24)
CN1016
Through the Flexible Flat Cable (FFC-171)
PAGE 4-7 of LEVEL3
CN8003 18P
PUSH AUTO FOCUS KEY_AD8-4 1
CH2_INT/XLR_XLR2 2
CH2_INT/XLR_INT 3
FOCUS_INFINITY KEY_AD8-7 4
FOCUS_AUTO KEY_AD8-6 5
CH1_INT/XLR1 6
REG_GND 7
CH2_AUTO_MANUAL 8
CH1_AUTO_MANUAL 9
ASSIGN1 KEY_AD8-1 10
ASSIGN2 KEY_AD8-2 11
ASSIGN3 KEY_AD8-3 12
REC_LEVEL_VOL_CH1 13
REG_GND 14
N.C. 15
D_2.8V 16
REC_LEVEL_VOL_CH2 17
REG_GND 18
CONTROL SWITCH BLOCK (AU24000)
PAGE 4-55 of LEVEL2
R8031 27k
R8030 8200
R8029 3900
R8014 2200
R8018 1500
R8022 1200
VD8005 XX
VD8006 XX
VD8008 XX
VD8011 XX
VD8013 XX
VD8007 XX
VD8009 XX
VD8012 XX
CN8005 6P
REG_GND 6
REG_GND 5
REG_GND 4
N.C. 3
N.C. 2
XEJECT_SW 1
FP-969 FLEXIBLE
LND101-LND106
PAGE 4-50 of LEVEL2
CN8002 8P
REG_GND 8
STATUS KEY_AD5-2 7
PIC_PROF KEY_AD5-1 6
MENU KEY_AD7-2 5
EXEC KEY_AD7-1 4
REG_GND 3
DIAL_A_VM 2
DIAL_B_VM 1
CONTROL SWITCH BLOCK (KP24000)
PAGE 4-57 of LEVEL2
VD8014 XX
VD8015 XX
LND802
CHASSIS_GND
CK-204 BOARD
CABINET(R) RELAY
XX MARK:NO MOUNT

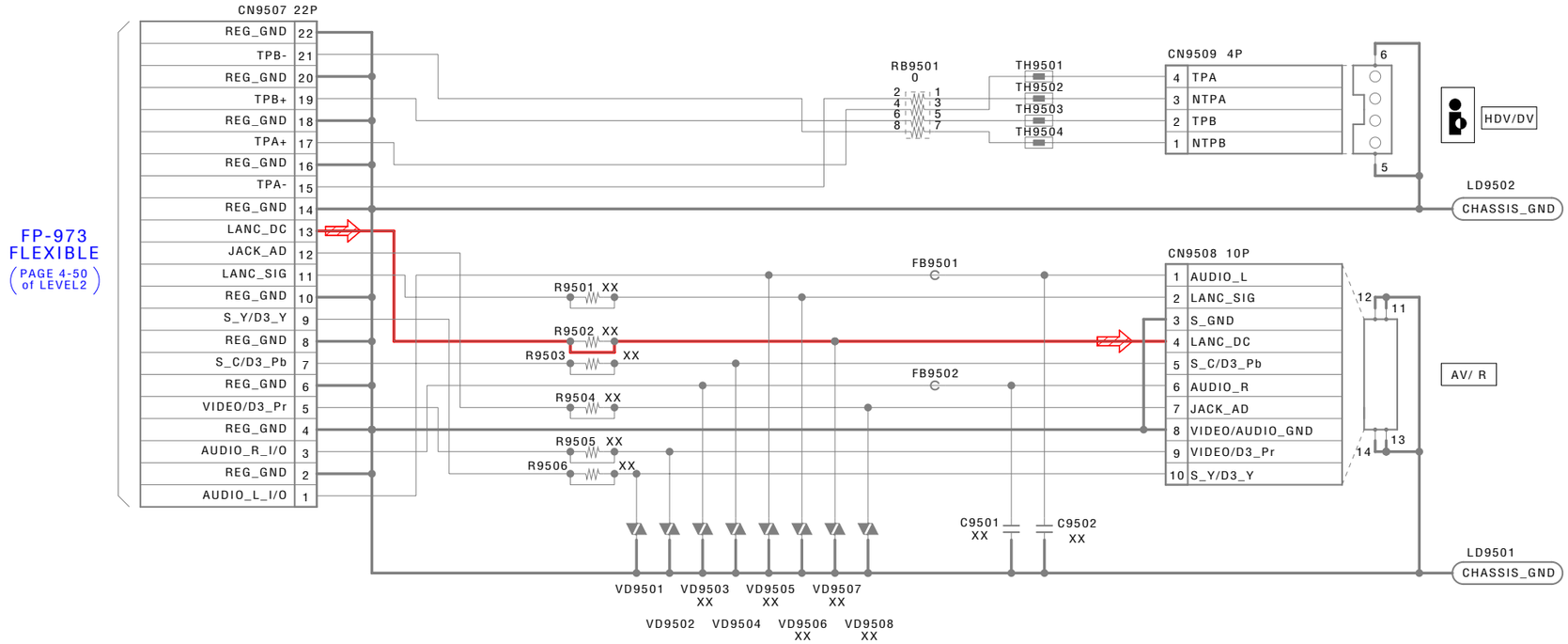

CN7802 6P
KEY_AD1 1
REG_GND 2
2nd_ZOOM_AD 3
REG_GND 4
5
D_2.8V 6
CONTROL SWITCH BLOCK (GZ92000)
LND001-LND007
(PAGE 4-57 of LEVEL2)
R7802 8200
R7803 3900
R7804 2200
R7805 1500
R7806 1200
R7801 27k
D7802 XX
S7801 (HANDLE ZOOM)
1 2 3 4 5 6
7 8 9 10
FIX VAR OFF
FP-974 FLEXIBLE
LND028-LND054
(PAGE 4-51 of LEVEL2)
CN7803 27P
REG_GND 1
REG_GND 2
REG_GND 3
XRST_VTR 4
VD_SI 5
VD_SO 6
VD_SCK 7
XCS_EVF 8
XCS_EVF_AD 9
REG_GND 10
EP_1.8V 11
EP_1.8V 12
REG_GND 13
EP_2.8V 14
EP_2.8V 15
REG_GND 16
EVF_R 17
EVF_G 18
EVF_B 19
REG_GND 20
EP_XVD 21
EP_XHD 22
REG_GND 23
REG_GND 24
REG_GND 25
REG_GND 26
REG_GND 27
C7811 47u 6.3V
R7819 XX
R7820 XX
C7803 XX
C7804 XX
C7809 XX
R7808 XX
R7809 XX
R7810 XX
C7802 XX
R7811 XX
IC7801 XX
6 NP
5 GND
4 VCONT
VOUT 1
FB 2
VIN 3
R7807 XX
C7801 XX
R7812 0
R7818 XX
C7807 XX
R7817 XX
C7808 XX
R7814 XX
R7815 XX
C7810 XX
R7816 XX
C7806 XX
IC7802 XX
6 NP
5 GND
4 VCONT
VOUT 1
FB 2
VIN 3
R7813 XX
C7805 XX
CN7801 33P
33 2SS_KEY_AD2
32 BODY_AD
31 2ND_ZOOM_AD
30 XRST_VTR
29 VD_SI
28 VD_SO
27 VD_SCK
26 XCS_EVF
25 XCS_EVF_AD
24 REG_GND
23 REG_GND
22 EP_1.8V
21 EP_1.8V
20 EP_1.8V
19 EP_2.8V
18 EP_2.8V
17 D_3.8V
16 REG_GND
15 REG_GND
14 EVF_R
13 REG_GND
12 REG_GND
11 REG_GND
10 EVF_G
9 REG_GND
8 REG_GND
7 REG_GND
6 EVF_B
5 REG_GND
4 REG_GND
3 EP_XVD
2 EP_XHD
1 REG_GND
FP-967 FLEXIBLE
LND240-LND272
(PAGE 4-49 of LEVEL2)
LND781
CHASSIS_GND
LND782
CHASSIS_GND
GP-025 BOARD
VC-VF RELAY
XX MARK:NO MOUNT
08



HP-153 BOARD

HEADPHONES JACK

XX MARK:NO MOUNT



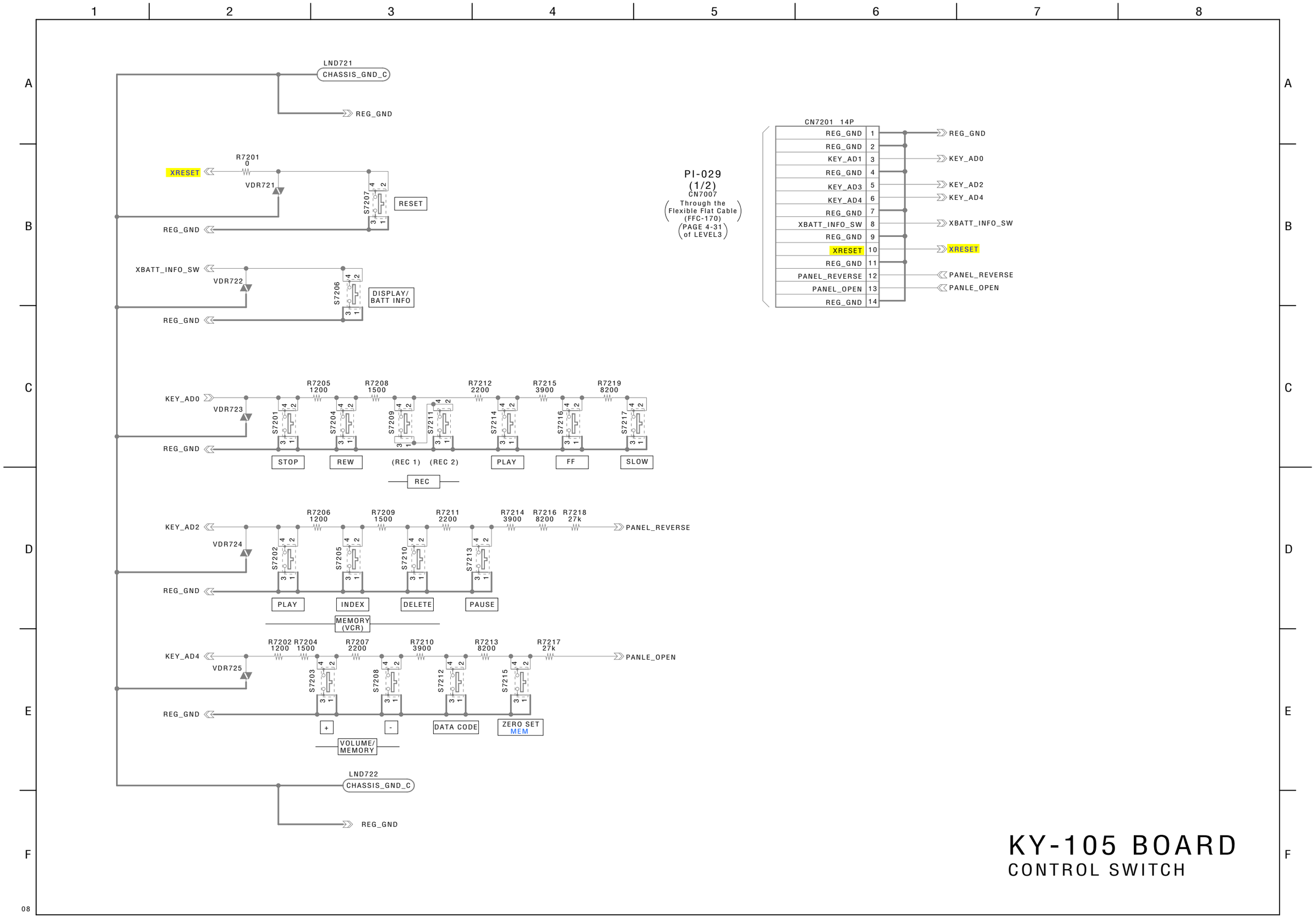
JK-376 BOARD

HDV/DV, A/V R CONNECTOR

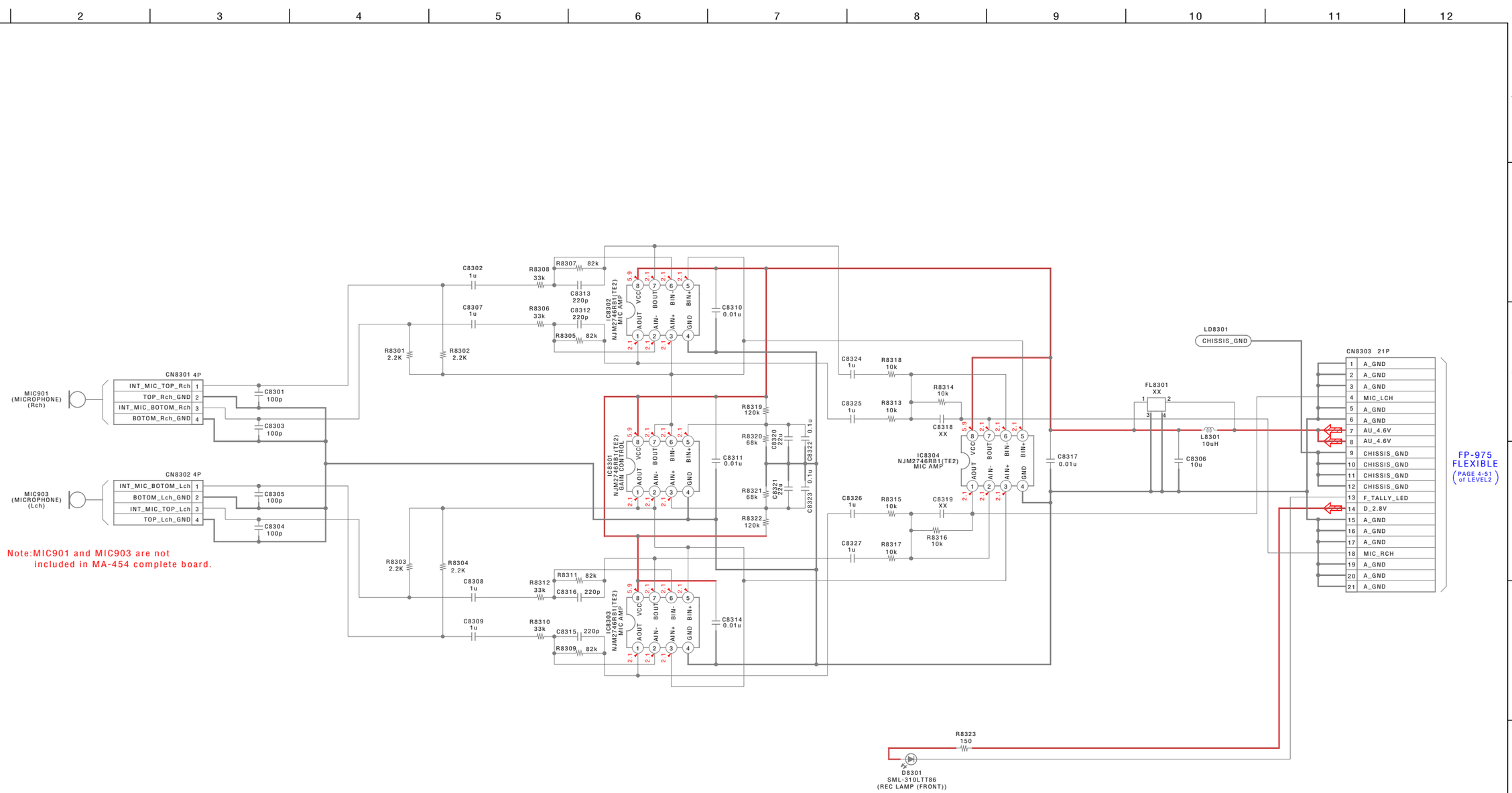
XX MARK:NO MOUNT

Ver. 1.1 2008.11

The changed portions from
Ver. 1.0 are shown in blue.



KY-105 BOARD
CONTROL SWITCH

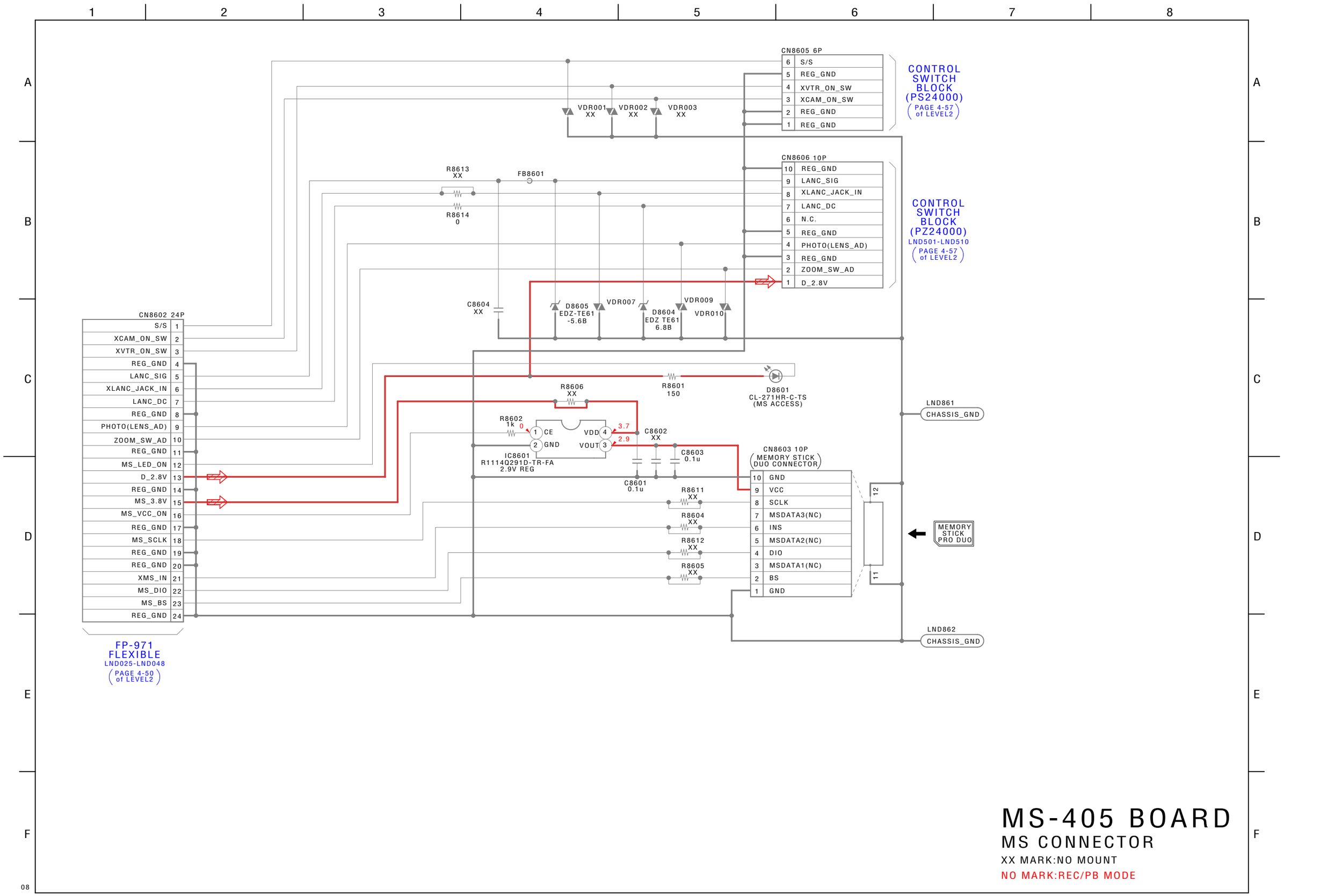


MA-454 BOARD

MIC AMP

XX MARK:NO MOUNT

NO MARK:REC/PB MODE

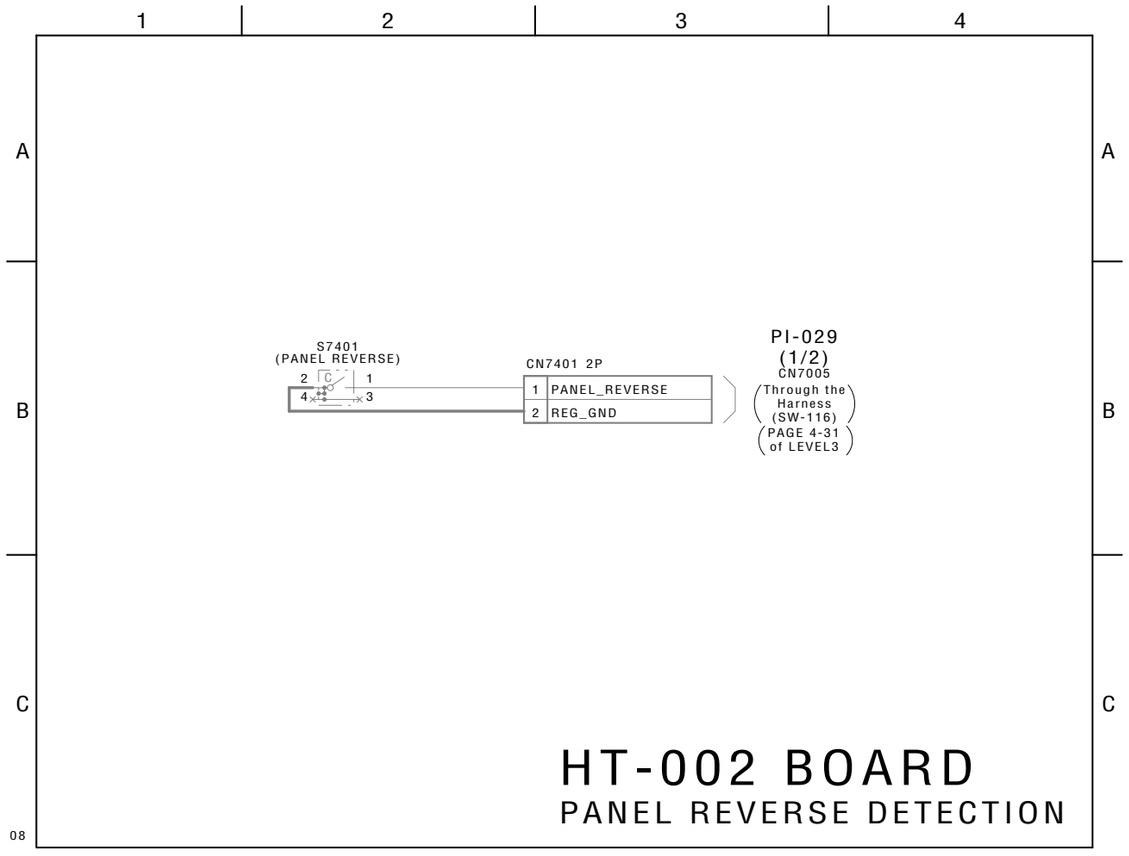


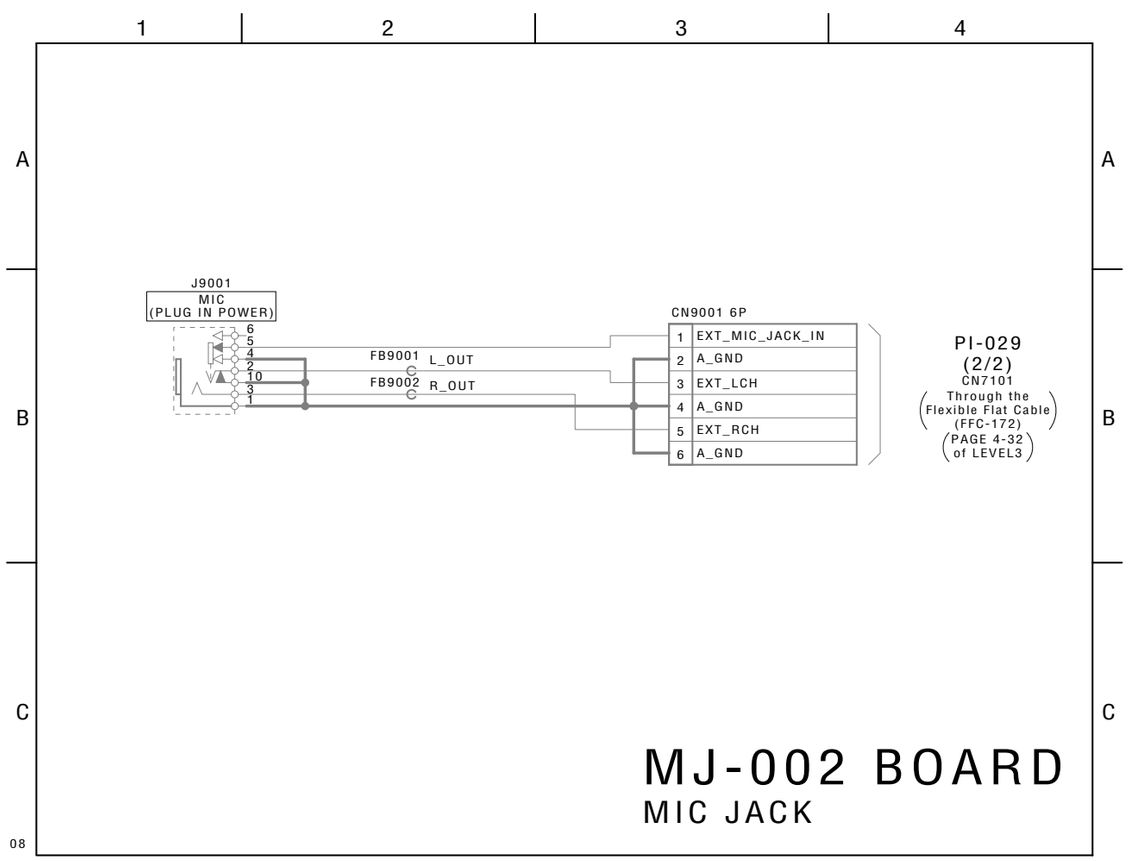
MS-405 BOARD

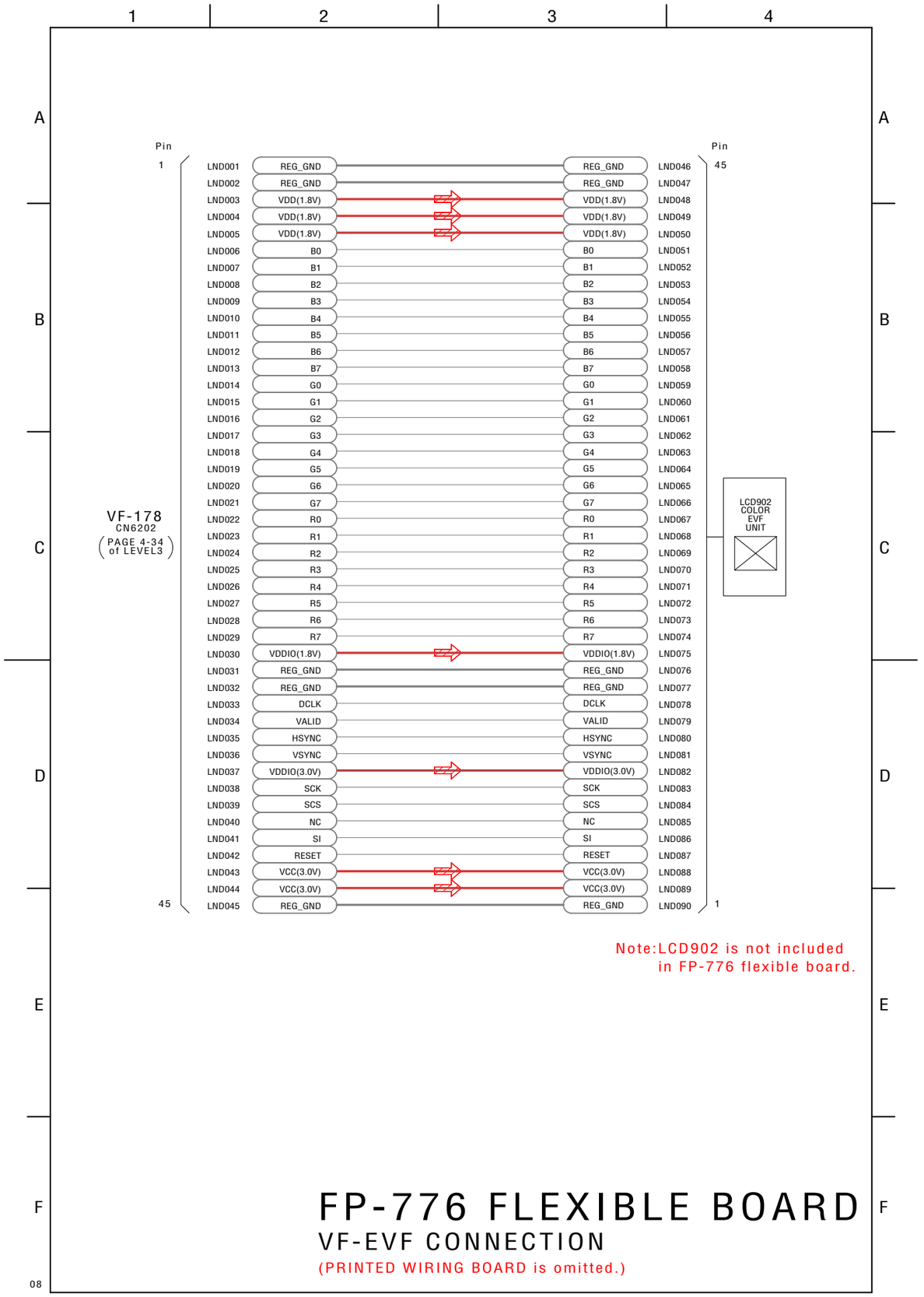
MS CONNECTOR

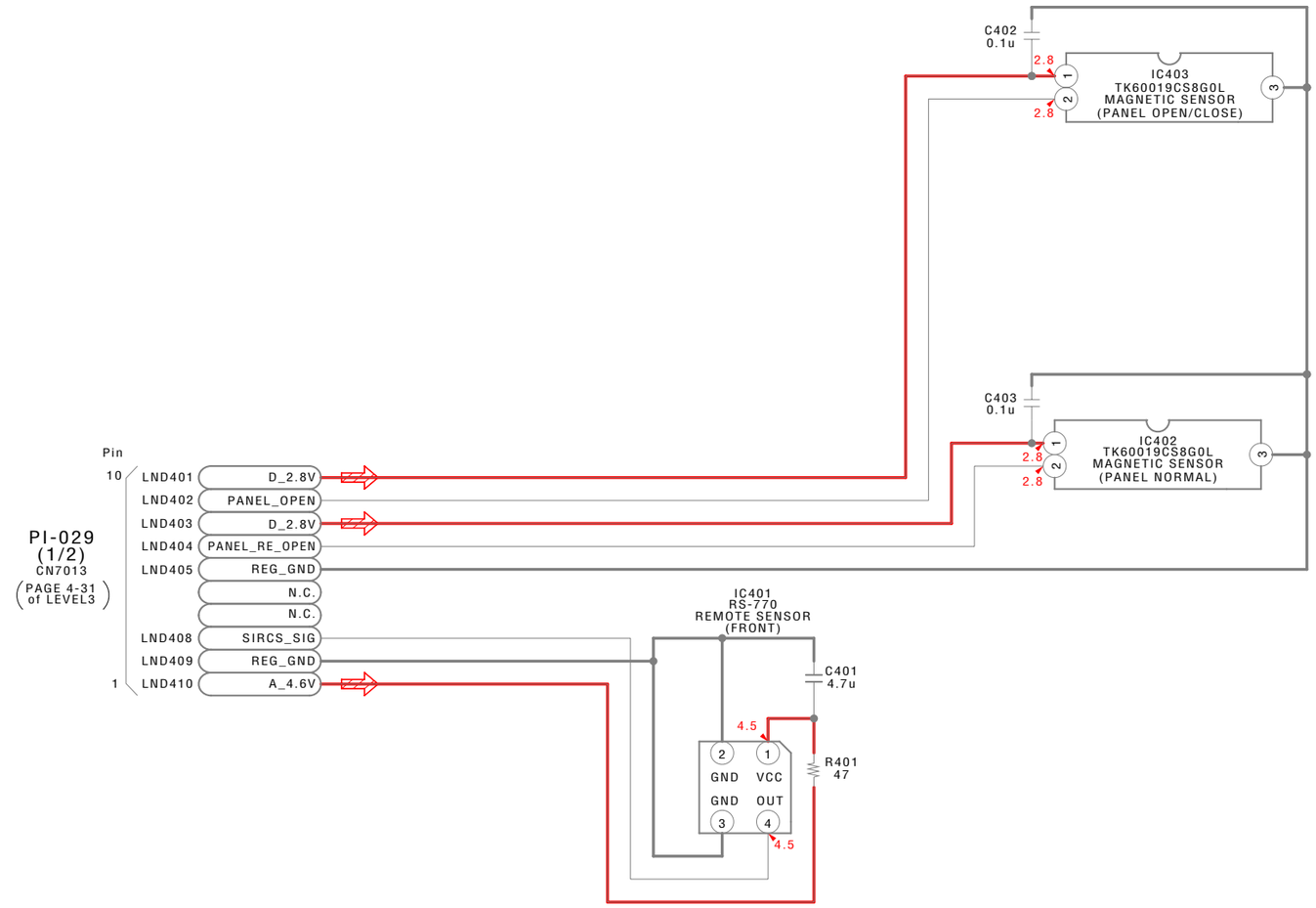
XX MARK:NO MOUNT

NO MARK:REC/PB MODE


S7401
(PANEL REVERSE)
2
C
1
4
3
CN7401 2P
1 PANEL_REVERSE
2 REG_GND
PI-029
(1/2)
CN7005
Through the Harness (SW-116)
PAGE 4-31 of LEVEL3
HT-002 BOARD
PANEL REVERSE DETECTION
08


J9001
MIC
(PLUG IN POWER)
6
5
4
2
10
3
1
FB9001 L_OUT
FB9002 R_OUT
CN9001 6P
1 EXT_MIC_JACK_IN
2 A_GND
3 EXT_LCH
4 A_GND
5 EXT_RCH
6 A_GND
PI-029
(2/2)
CN7101
Through the Flexible Flat Cable (FFC-172)
PAGE 4-32 of LEVEL3
MJ-002 BOARD
MIC JACK
08

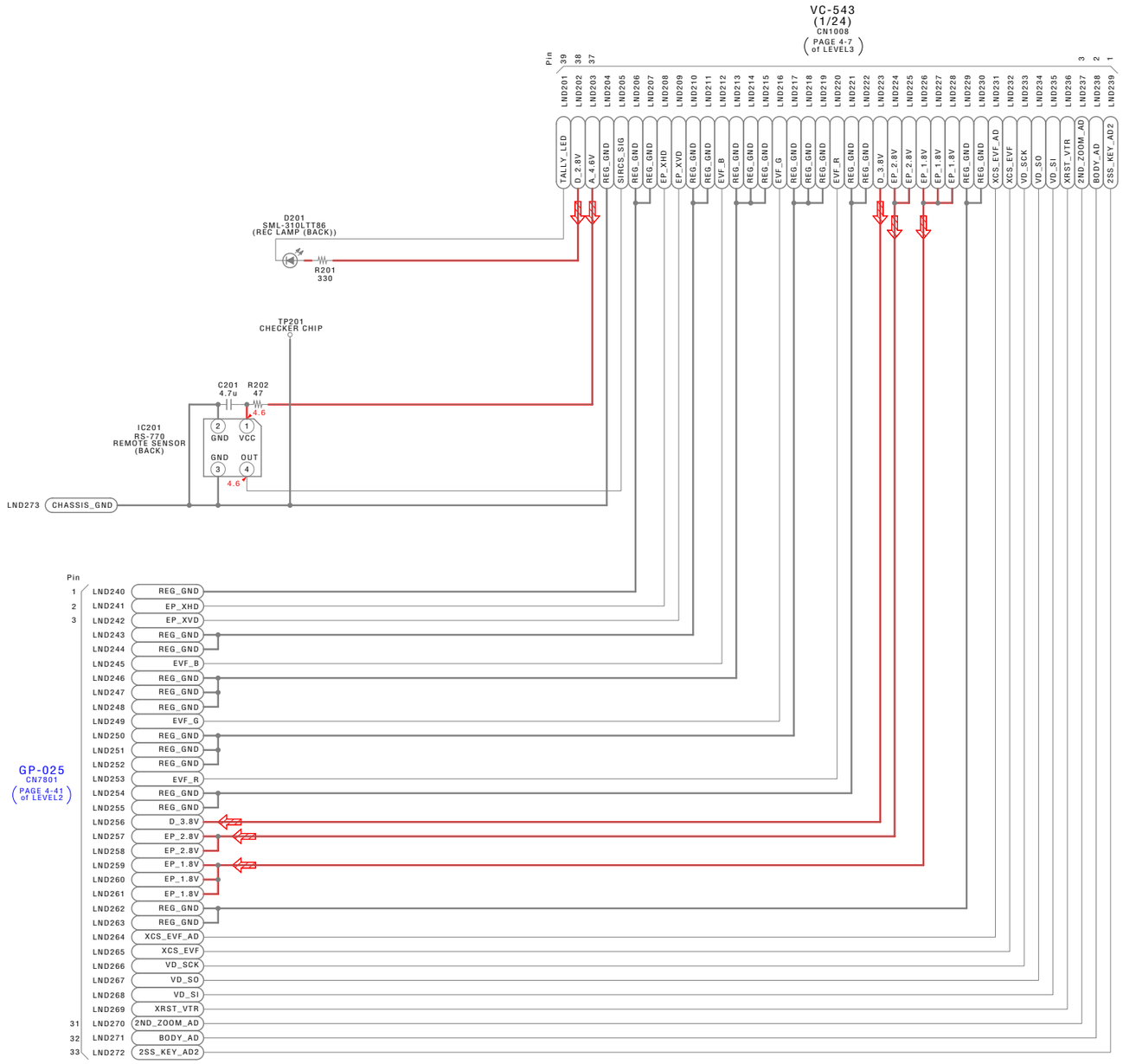

VF-178
CN6202
PAGE 4-34 of LEVEL3
Pin 1
Pin 45
LND001 REG_GND REG_GND LND046
LND002 REG_GND REG_GND LND047
LND003 VDD(1.8V) VDD(1.8V) LND048
LND004 VDD(1.8V) VDD(1.8V) LND049
LND005 VDD(1.8V) VDD(1.8V) LND050
LND006 B0 B0 LND051
LND007 B1 B1 LND052
LND008 B2 B2 LND053
LND009 B3 B3 LND054
LND010 B4 B4 LND055
LND011 B5 B5 LND056
LND012 B6 B6 LND057
LND013 B7 B7 LND058
LND014 G0 G0 LND059
LND015 G1 G1 LND060
LND016 G2 G2 LND061
LND017 G3 G3 LND062
LND018 G4 G4 LND063
LND019 G5 G5 LND064
LND020 G6 G6 LND065
LND021 G7 G7 LND066
LND022 R0 R0 LND067
LND023 R1 R1 LND068
LND024 R2 R2 LND069
LND025 R3 R3 LND070
LND026 R4 R4 LND071
LND027 R5 R5 LND072
LND028 R6 R6 LND073
LND029 R7 R7 LND074
LND030 VDDIO(1.8V) VDDIO(1.8V) LND075
LND031 REG_GND REG_GND LND076
LND032 REG_GND REG_GND LND077
LND033 DCLK DCLK LND078
LND034 VALID VALID LND079
LND035 HSYNC HSYNC LND080
LND036 VSYNC VSYNC LND081
LND037 VDDIO(3.0V) VDDIO(3.0V) LND082
LND038 SCK SCK LND083
LND039 SCS SCS LND084
LND040 NC NC LND085
LND041 SI SI LND086
LND042 RESET RESET LND087
LND043 VCC(3.0V) VCC(3.0V) LND088
LND044 VCC(3.0V) VCC(3.0V) LND089
LND045 REG_GND REG_GND LND090
45
1
LCD902
COLOR
EVF
UNIT
Note:LCD902 is not included in FP-776 flexible board.
FP-776 FLEXIBLE BOARD
VF-EVF CONNECTION
(PRINTED WIRING BOARD is omitted.)
08



FP-966 FLEXIBLE BOARD

REMOTE SENSOR(FRONT), PANEL DETECT

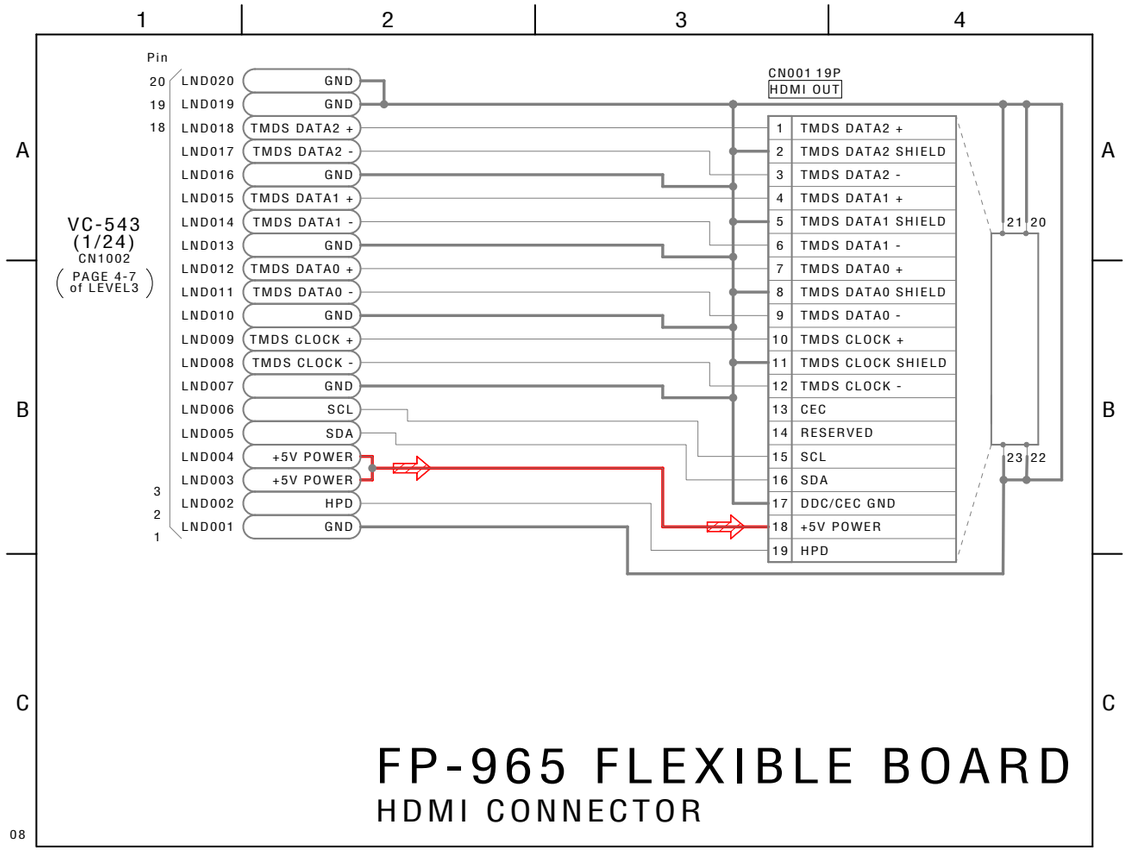
NO MARK:REC/PB MODE



FP-967 FLEXIBLE BOARD

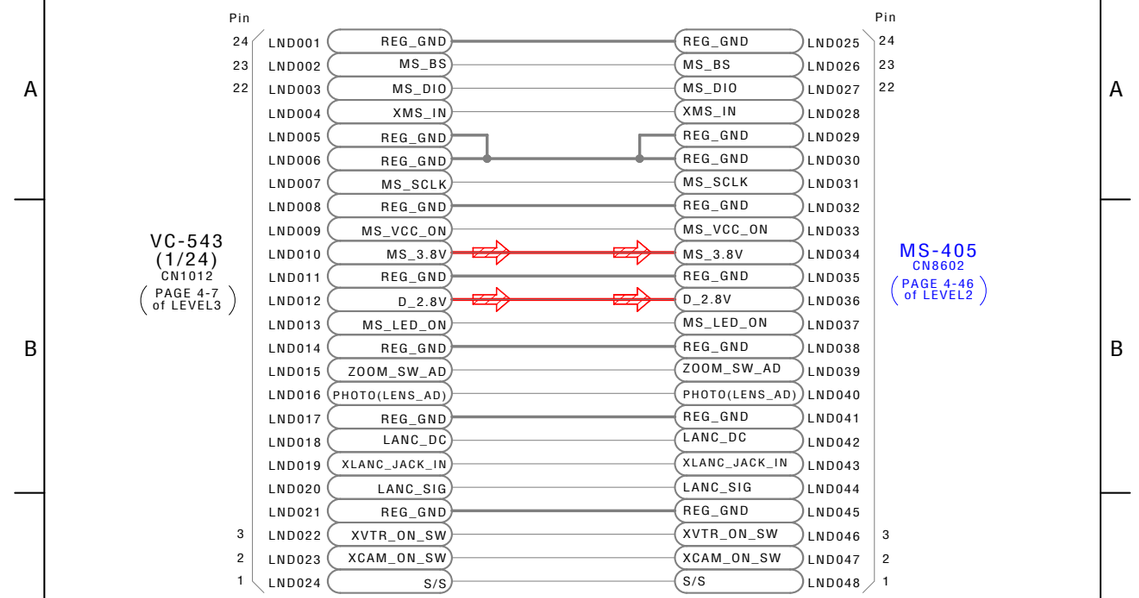
VC-GP CONNECTION, REMOTE SENSOR(BACK)

NO MARK:REC/PB MODE



FP-965 FLEXIBLE BOARD

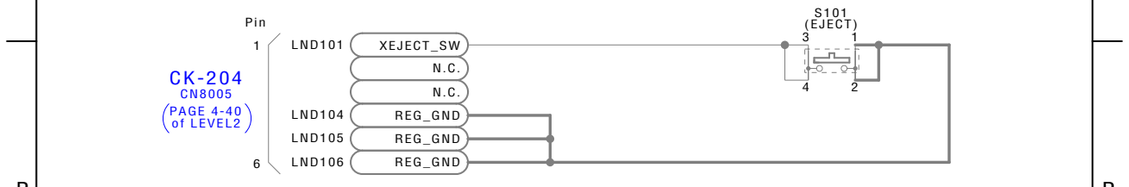
HDMI CONNECTOR



FP-971 FLEXIBLE BOARD

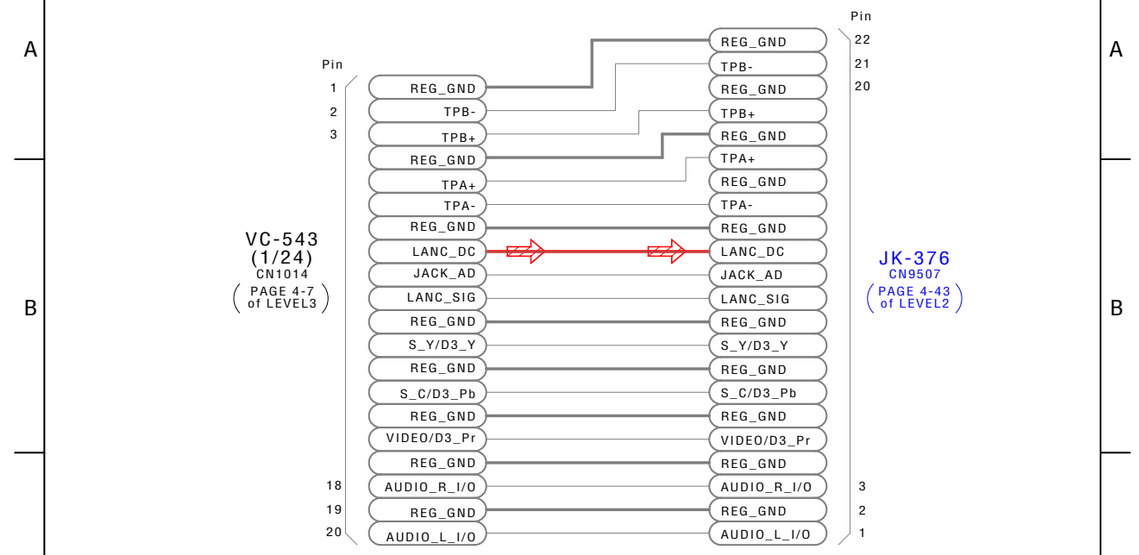
VC-MS CONNECTION

(PRINTED WIRING BOARD is omitted.)



FP-969 FLEXIBLE BOARD

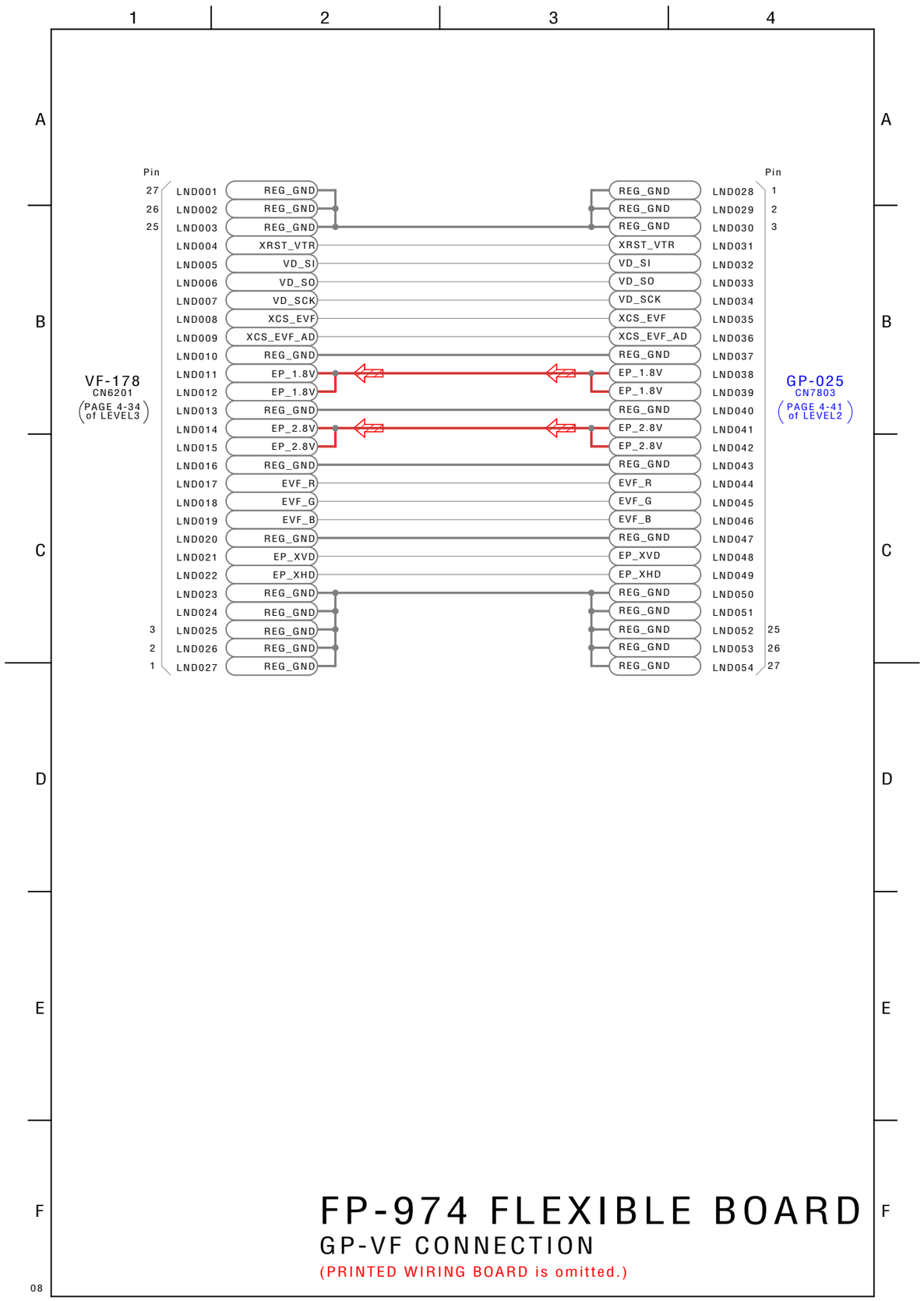
EJECT SWITCH

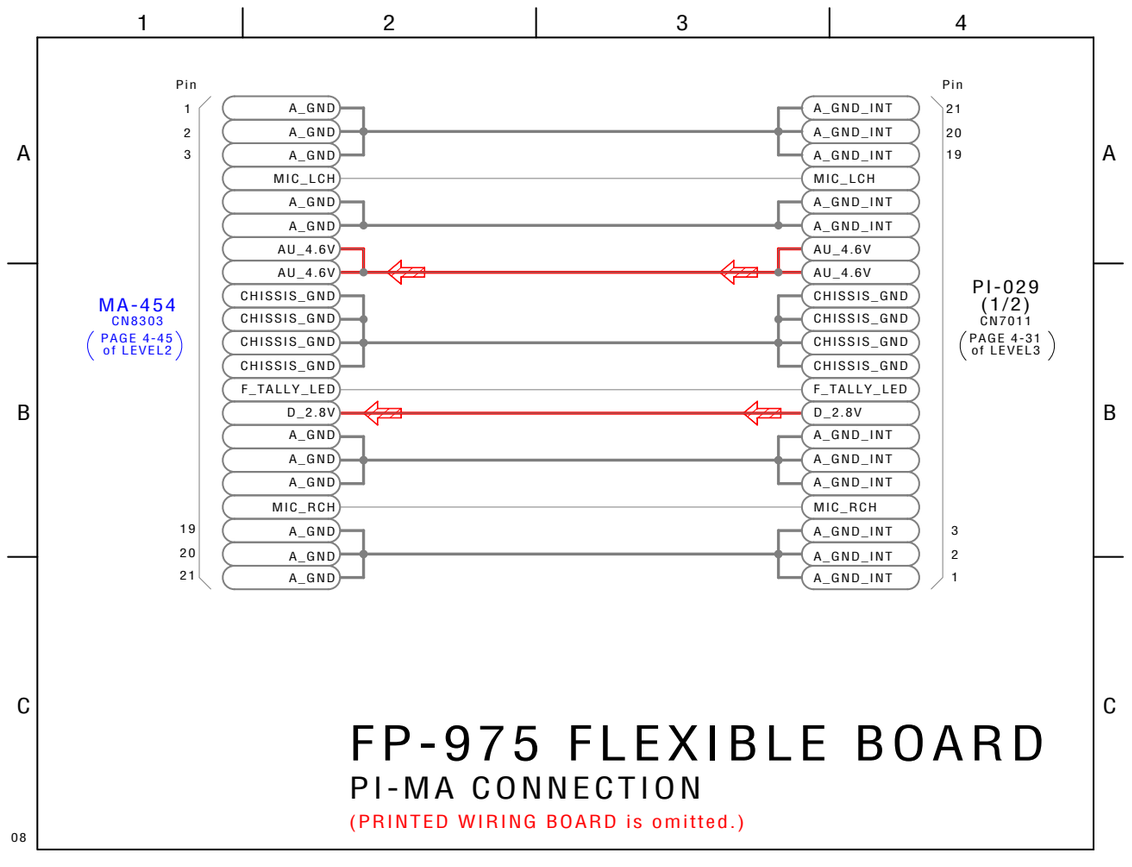


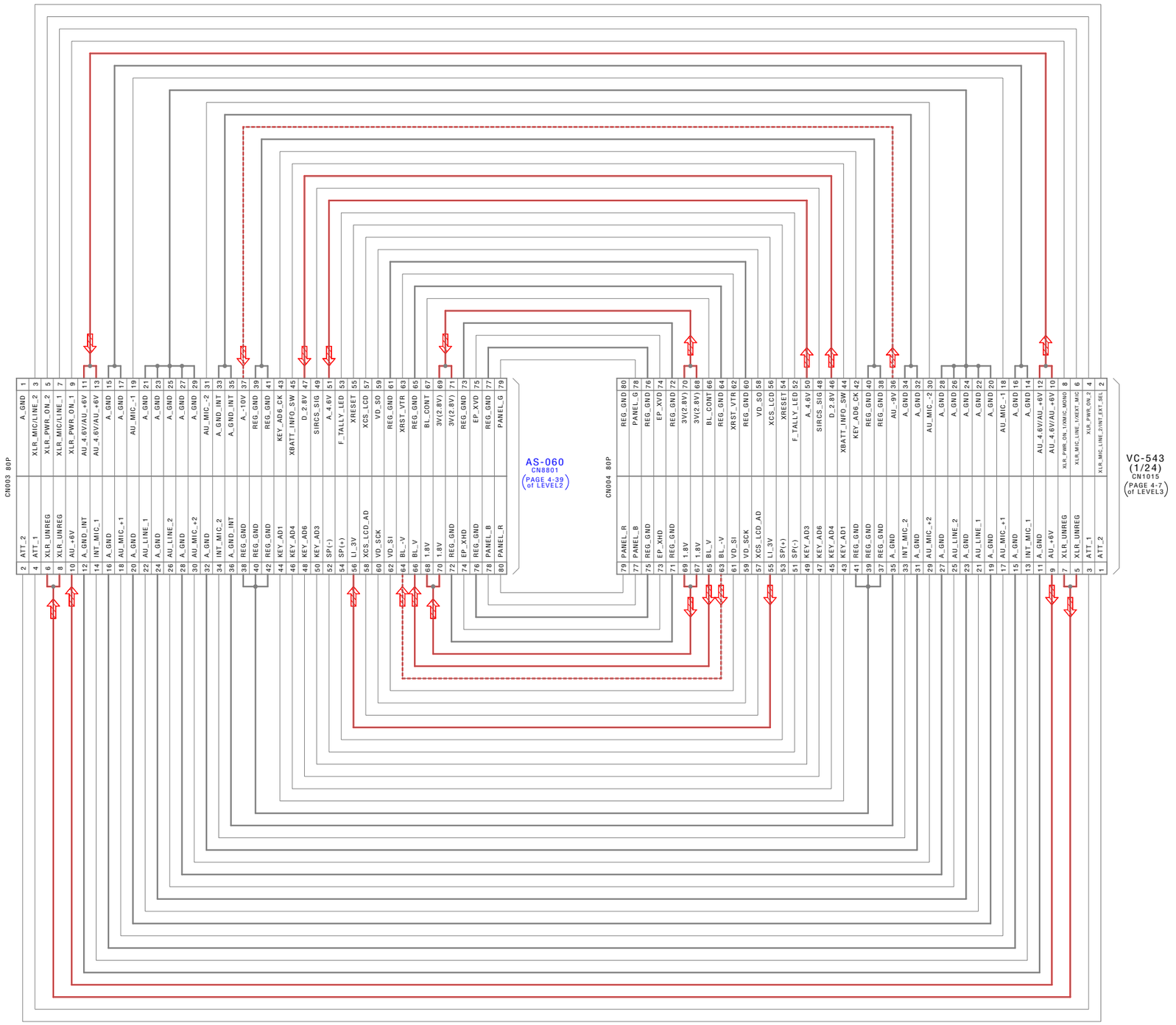
FP-973 FLEXIBLE BOARD

VC-JK CONNECTION

(PRINTED WIRING BOARD is omitted.)


1
2
3
4
A
B
C
D
E
F
Pin
27
26
25
3
2
1
LND001
LND002
LND003
LND004
LND005
LND006
LND007
LND008
LND009
LND010
LND011
LND012
LND013
LND014
LND015
LND016
LND017
LND018
LND019
LND020
LND021
LND022
LND023
LND024
LND025
LND026
LND027
REG_GND
REG_GND
REG_GND
XRST_VTR
VD_SI
VD_SO
VD_SCK
XCS_EVF
XCS_EVF_AD
REG_GND
EP_1.8V
EP_1.8V
REG_GND
EP_2.8V
EP_2.8V
REG_GND
EVF_R
EVF_G
EVF_B
REG_GND
EP_XVD
EP_XHD
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
REG_GND
LND028
LND029
LND030
LND031
LND032
LND033
LND034
LND035
LND036
LND037
LND038
LND039
LND040
LND041
LND042
LND043
LND044
LND045
LND046
LND047
LND048
LND049
LND050
LND051
LND052
LND053
LND054
Pin
1
2
3
25
26
27
VF-178
CN6201
PAGE 4-34
of LEVEL3
GP-025
CN7803
PAGE 4-41
of LEVEL2
FP-974 FLEXIBLE BOARD
GP-VF CONNECTION
(PRINTED WIRING BOARD is omitted.)
08

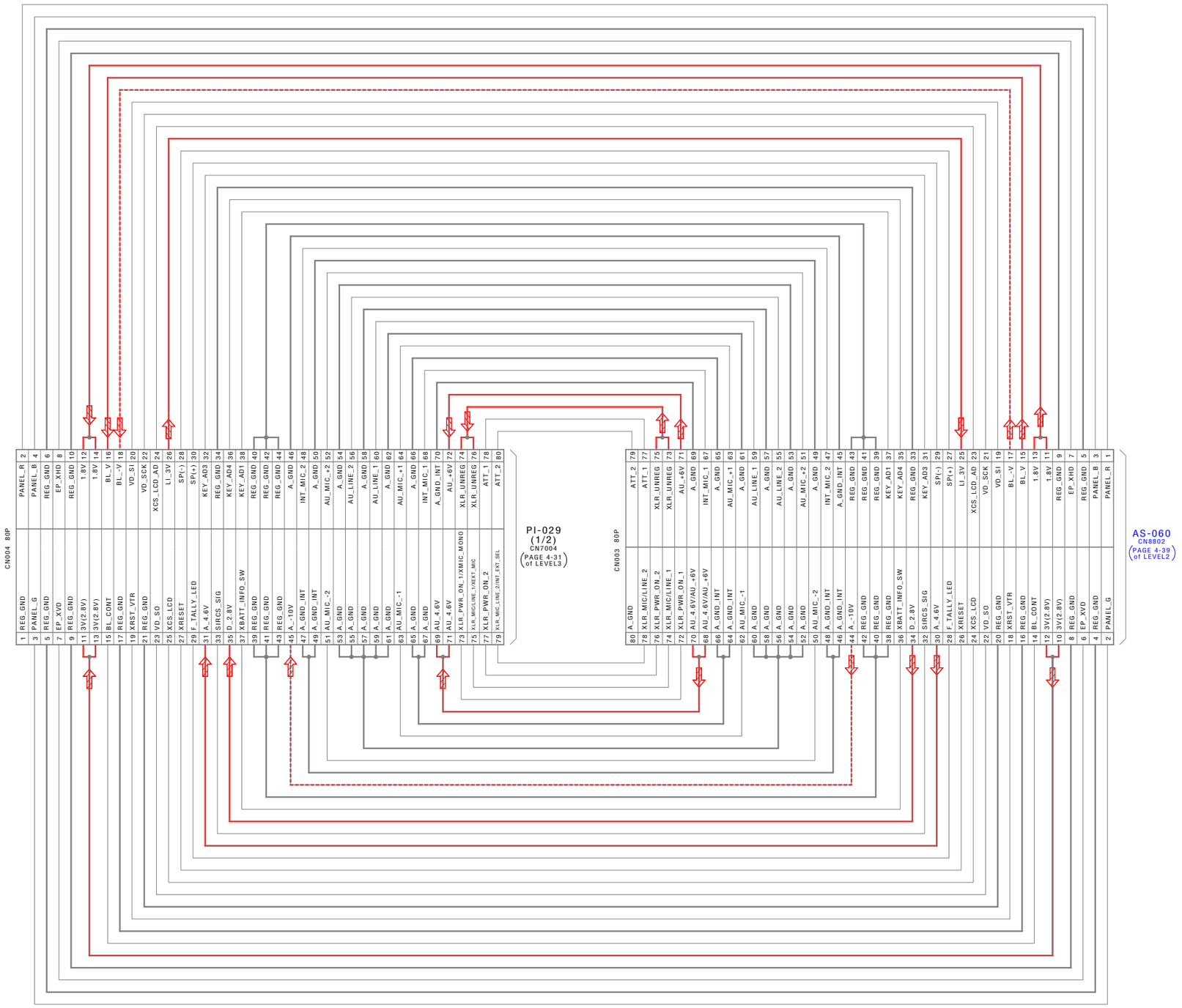

1
2
3
4
A
B
C
Pin
1
2
3
19
20
21
A_GND
A_GND
A_GND
MIC_LCH
A_GND
A_GND
AU_4.6V
AU_4.6V
CHISSIS_GND
CHISSIS_GND
CHISSIS_GND
CHISSIS_GND
F_TALLY_LED
D_2.8V
A_GND
A_GND
A_GND
MIC_RCH
A_GND
A_GND
A_GND
A_GND_INT
A_GND_INT
A_GND_INT
MIC_LCH
A_GND_INT
A_GND_INT
AU_4.6V
AU_4.6V
CHISSIS_GND
CHISSIS_GND
CHISSIS_GND
CHISSIS_GND
F_TALLY_LED
D_2.8V
A_GND_INT
A_GND_INT
A_GND_INT
MIC_RCH
A_GND_INT
A_GND_INT
A_GND_INT
Pin
21
20
19
3
2
1
MA-454
CN8303
PAGE 4-45
of LEVEL2
PI-029
(1/2)
CN7011
PAGE 4-31
of LEVEL3
FP-975 FLEXIBLE BOARD
PI-MA CONNECTION
(PRINTED WIRING BOARD is omitted.)
08



FP-981 FLEXIBLE BOARD

VC-AS CONNECTION

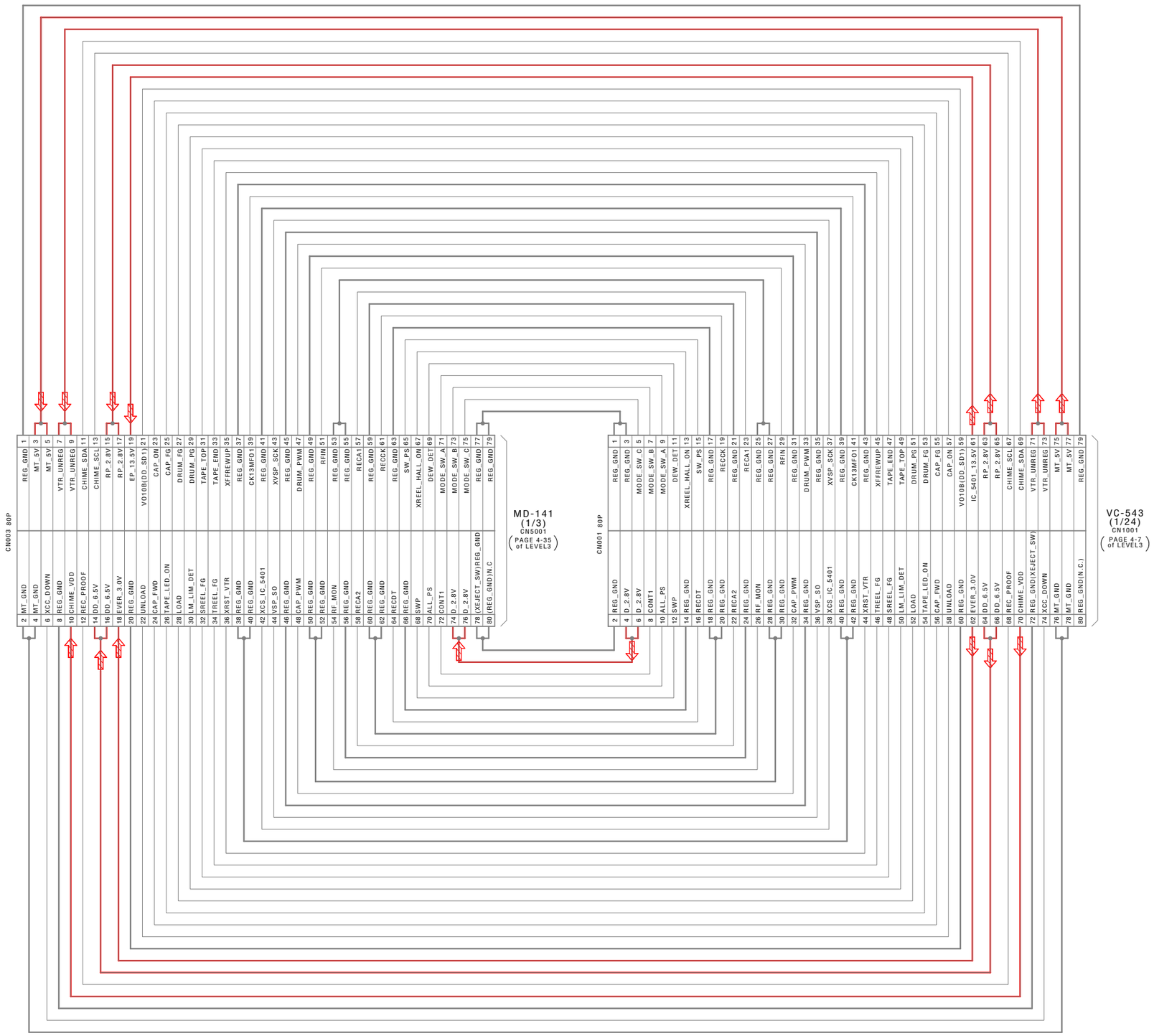
(PRINTED WIRING BOARD is omitted.)



FP-982 FLEXIBLE BOARD

AS-PI CONNECTION

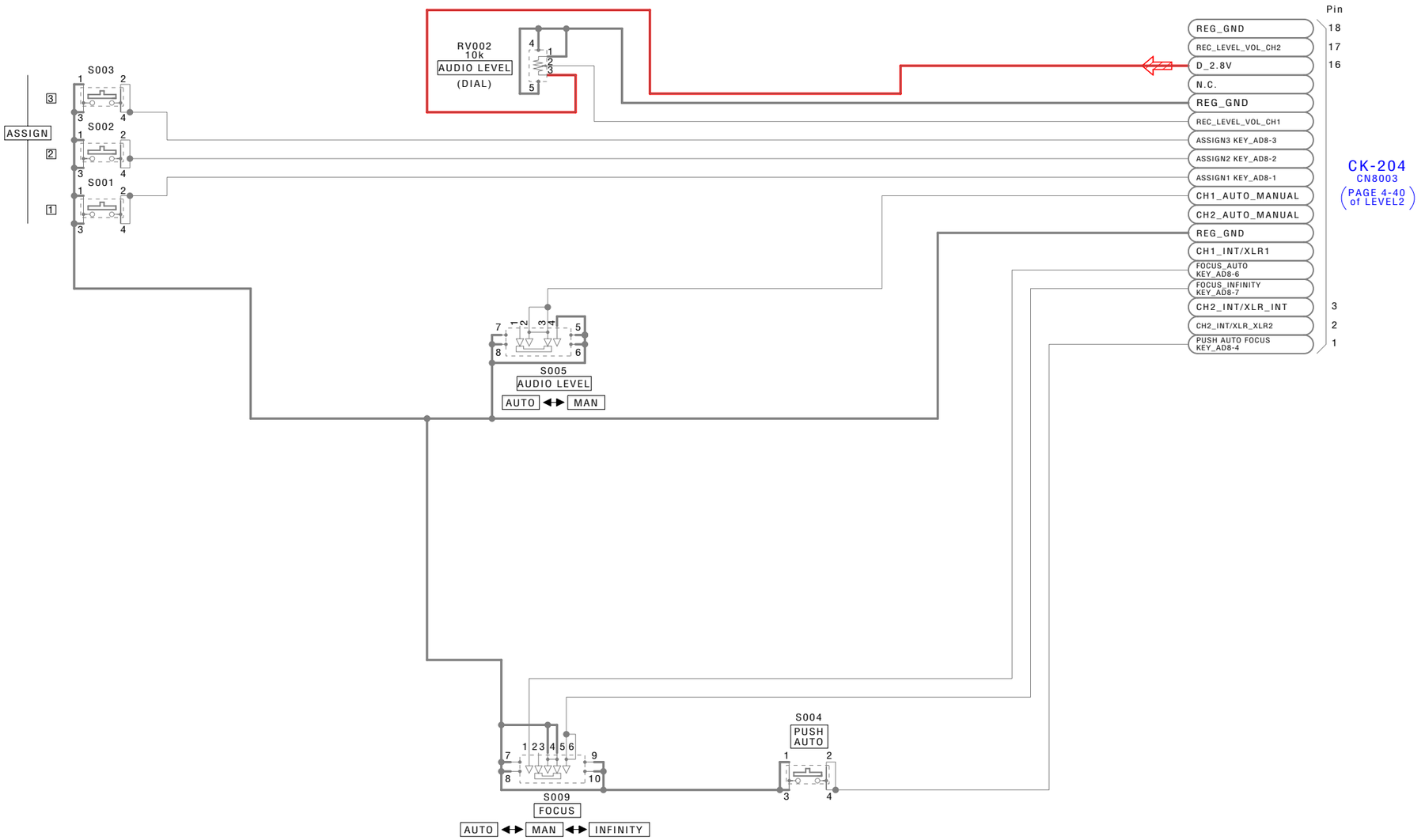
(PRINTED WIRING BOARD is omitted.)



FP-983 FLEXIBLE BOARD

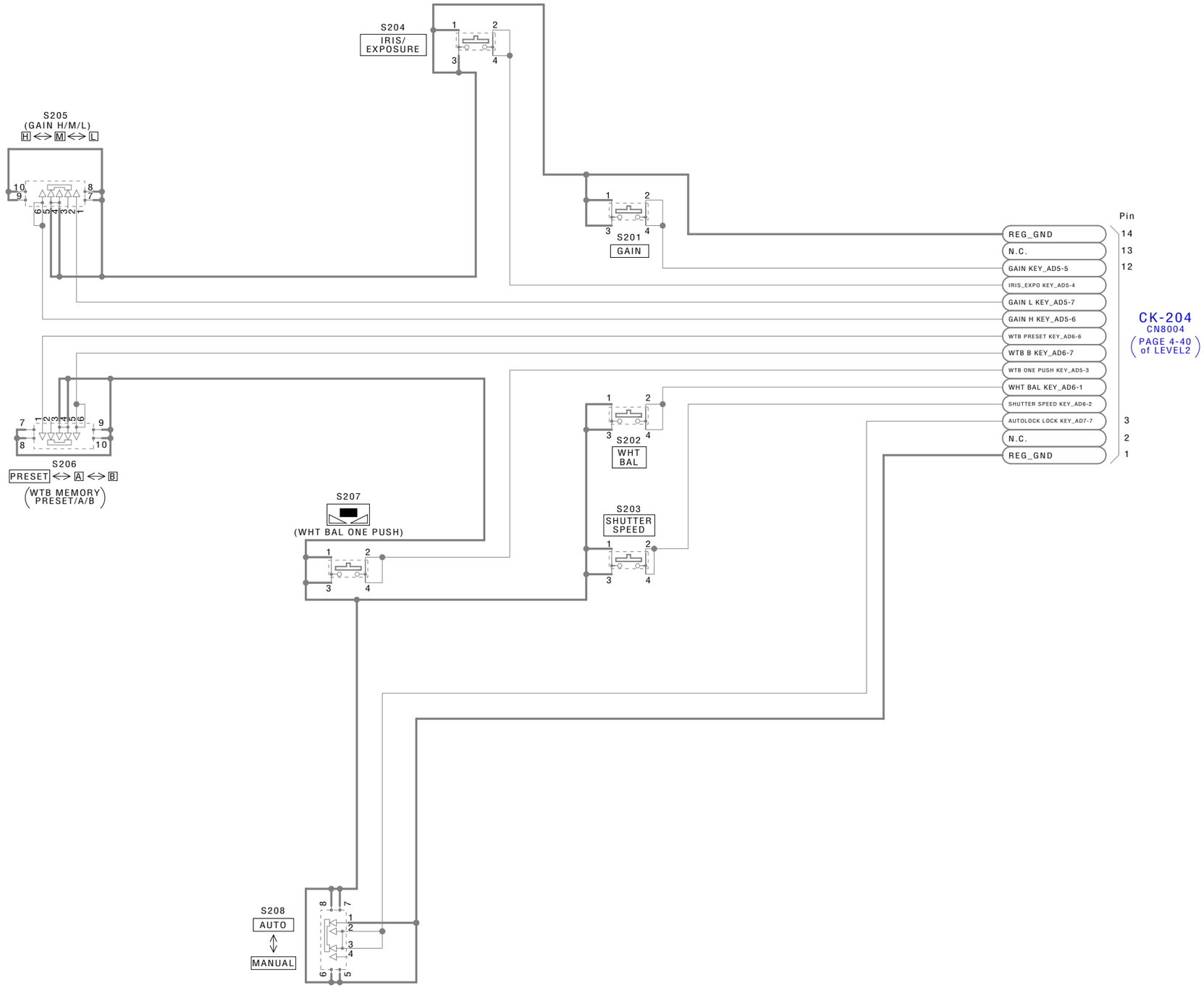
VC-MD CONECTION

(PRINTED WIRING BOARD is omitted.)



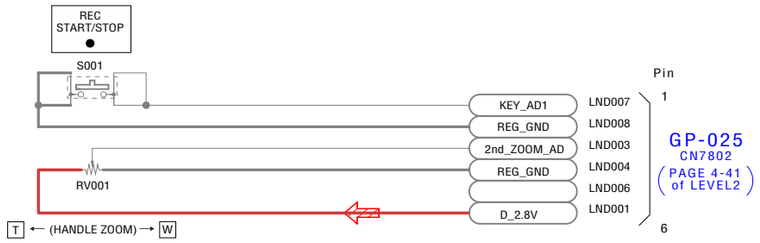
CONTROL SWITCH BLOCK (AU24000)

CONTROL SWITCH BLOCK(AU24000)is replaced as block, so that PRINTED WIRING BOARD is omitted.



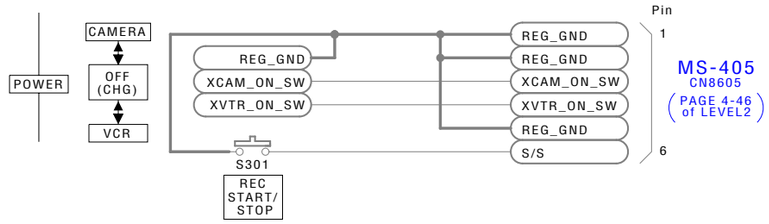
CONTROL SWITCH BLOCK (CF24000)

(CONTROL SWITCH BLOCK(CF24000)is replaced as block, so that PRINTED WIRING BOARD is omitted.)



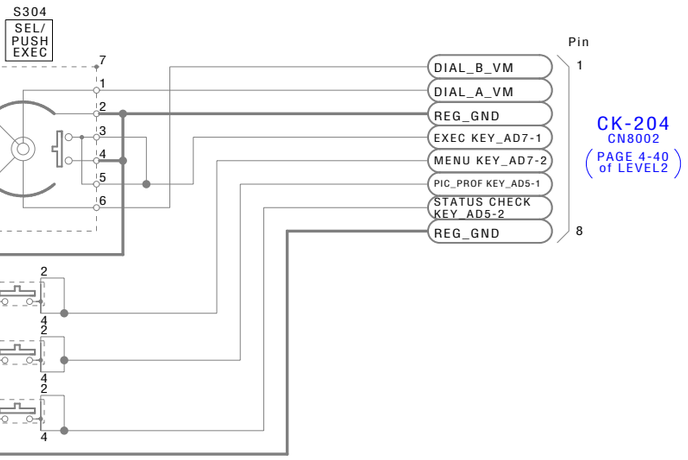
CONTROL SWITCH BLOCK (GZ92000)

(CONTROL SWITCH BLOCK(GZ92000)is replaced as block, so that PRINTED WIRING BOARD is omitted.)



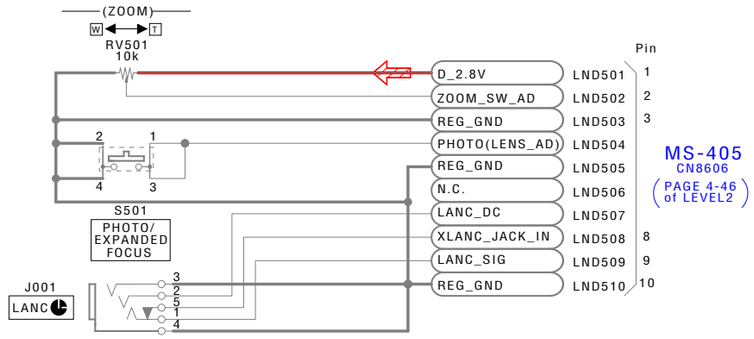
CONTROL SWITCH BLOCK (PS24000)

(CONTROL SWITCH BLOCK(PS24000)is replaced as block, so that PRINTED WIRING BOARD is omitted.)



CONTROL SWITCH BLOCK (KP24000)

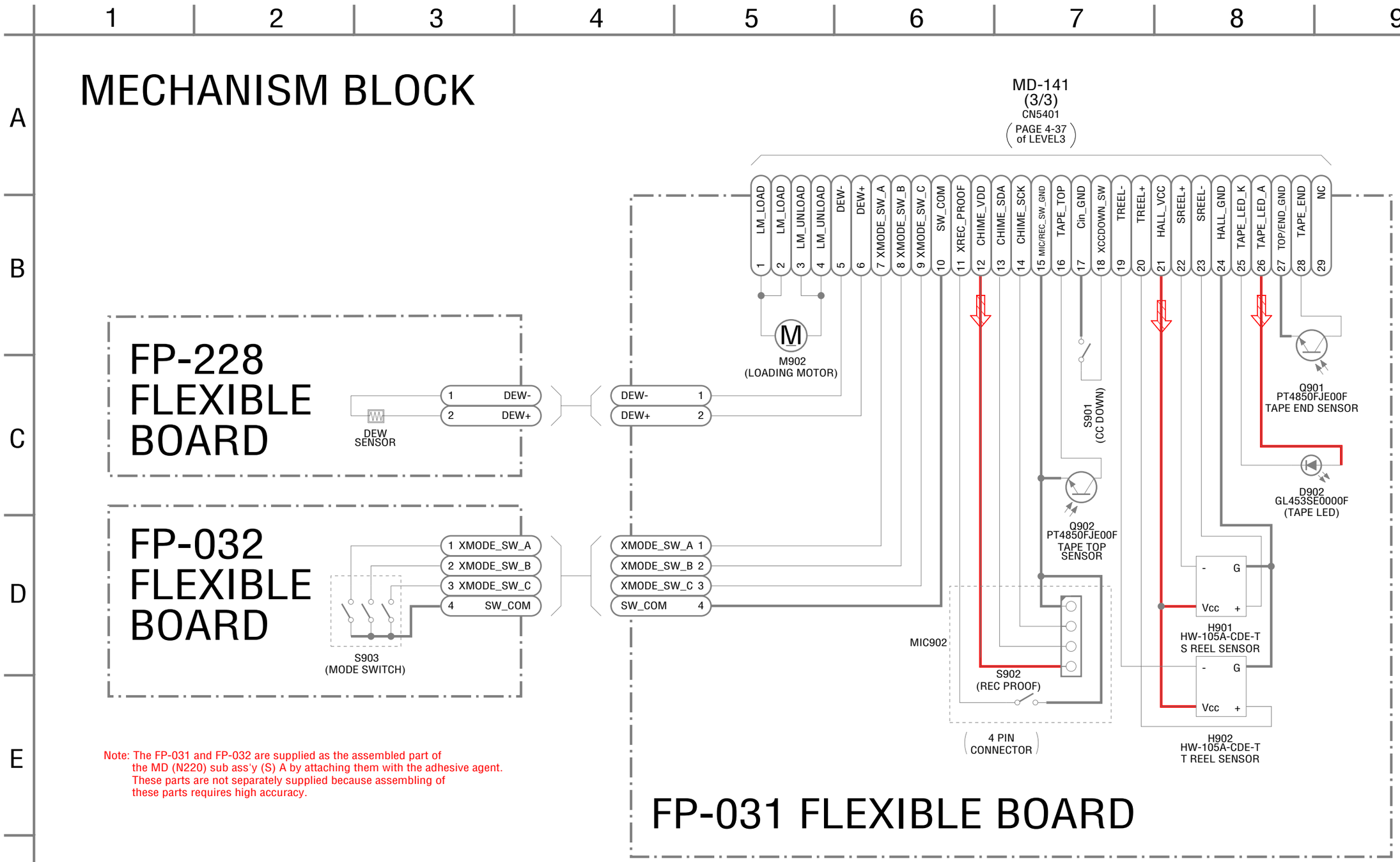
(CONTROL SWITCH BLOCK(KP24000)is replaced as block, so that PRINTED WIRING BOARD is omitted.)



CONTROL SWITCH BLOCK (PZ24000)

(CONTROL SWITCH BLOCK(PZ24000)is replaced as block, so that PRINTED WIRING BOARD is omitted.)

MECHANISM BLOCK



Note: The FP-031 and FP-032 are supplied as the assembled part of the MD (N220) sub ass'y (S) A by attaching them with the adhesive agent. These parts are not separately supplied because assembling of these parts requires high accuracy.

08

4-3. PRINTED WIRING BOARDS

Link

GY-014 BOARD	MS-405 BOARD
AS-060 BOARD	HT-002 BOARD
CK-204 BOARD	MJ-002 BOARD
GP-025 BOARD	FP-966 FLEXIBLE BOARD
HP-153 BOARD	FP-967 FLEXIBLE BOARD
JK-376 BOARD	FP-965 FLEXIBLE BOARD
KY-105 BOARD	FP-969 FLEXIBLE BOARD
MA-454 BOARD	FP-031, FP-032, FP-228 FLEXIBLE BOARD

COMMON NOTE FOR PRINTED WIRING BOARDS

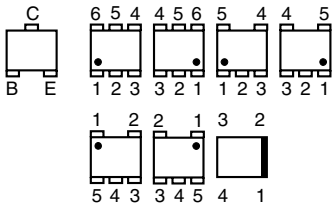
4-3. PRINTED WIRING BOARDS

(ENGLISH)

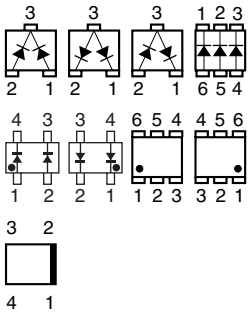
THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS

- : Uses unleaded solder.
- : Circuit board
  : Flexible board
  Pattern from the side which enables seeing.
  : pattern of the rear side
  (The other layers' patterns are not indicated)
- Through hole is omitted.
- There are a few cases that the part printed on diagram isn't mounted in this model.
- : panel designation
- Chip parts.

Transistor



Diode



(JAPANESE)

プリント図共通ノート

【プリント図ノート】

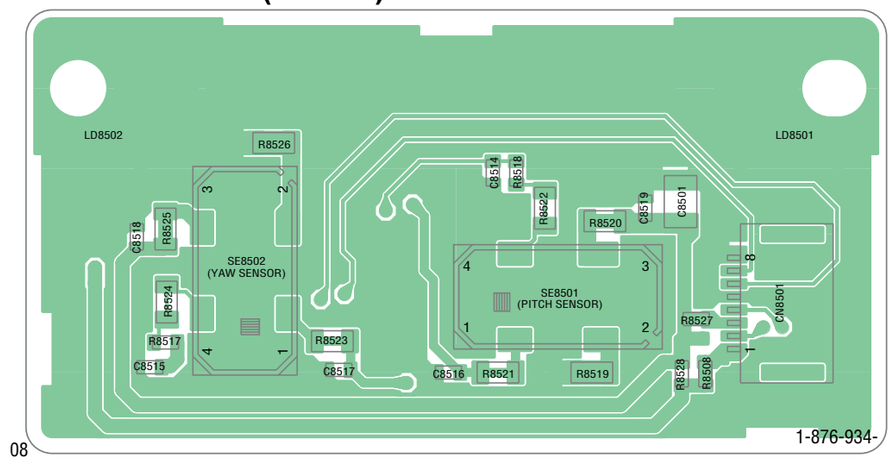
- **：無鉛半田を使用しています。**
- **：基板**
  ：フレキシブル配線板
  見ている面側のパターン。
  ：裏側のパターン
  （他のパターンについては表示されていません）
- **スルーホールは省略。**
- **プリント図には，本機で使用していない部品が記載されている場合があります。**
- **はパネル表示名称。**

Printed wiring boards of the CM-097, CM-104, VC-543, PI-029, PD-372, VF-178 and MD-141 boards are not shown. Pages 4-60 to 4-65 are not shown.

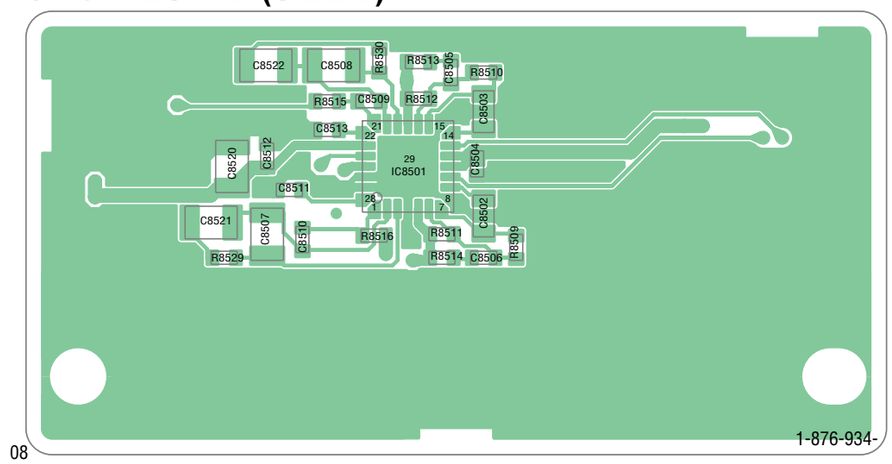
GY-014 (2 layers), CK-204 (2 layers)

: Uses unleaded solder.

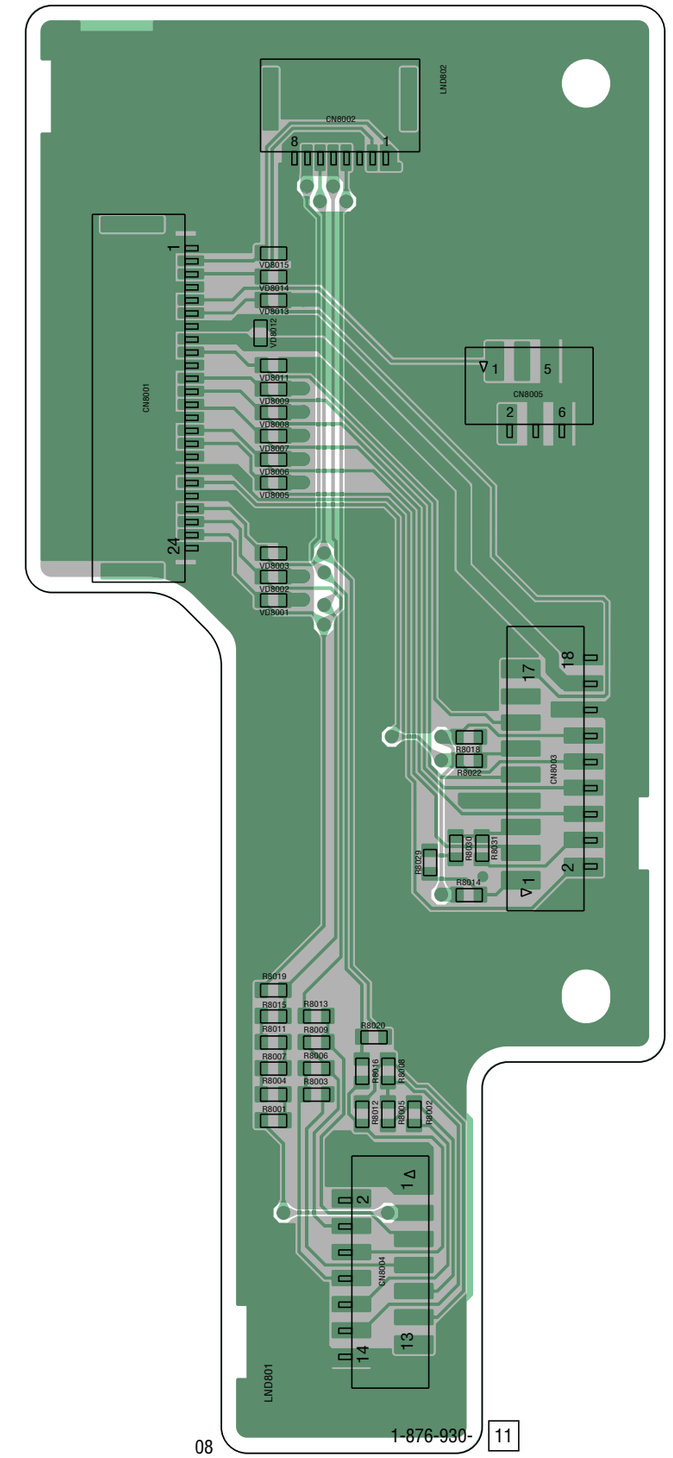
GY-014 BOARD (SIDE A)



GY-014 BOARD (SIDE B)



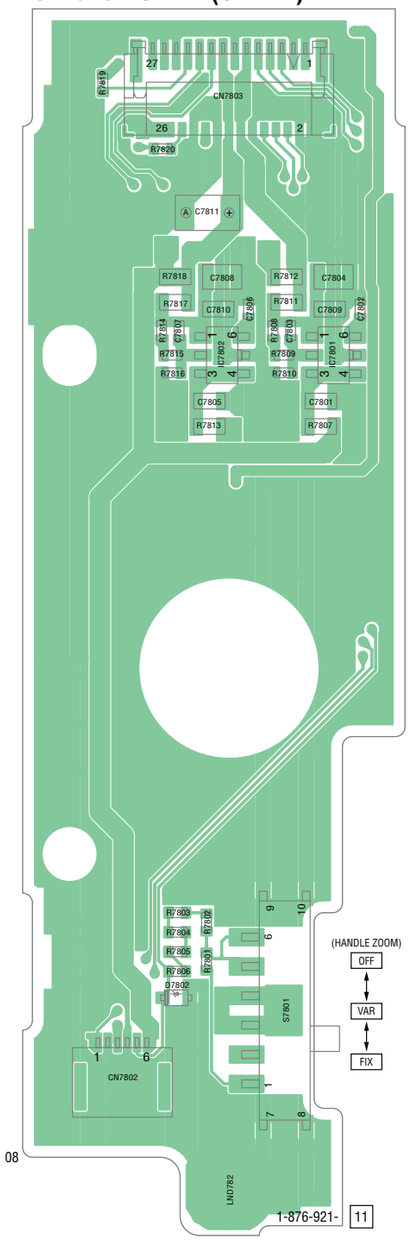
CK-204 BOARD



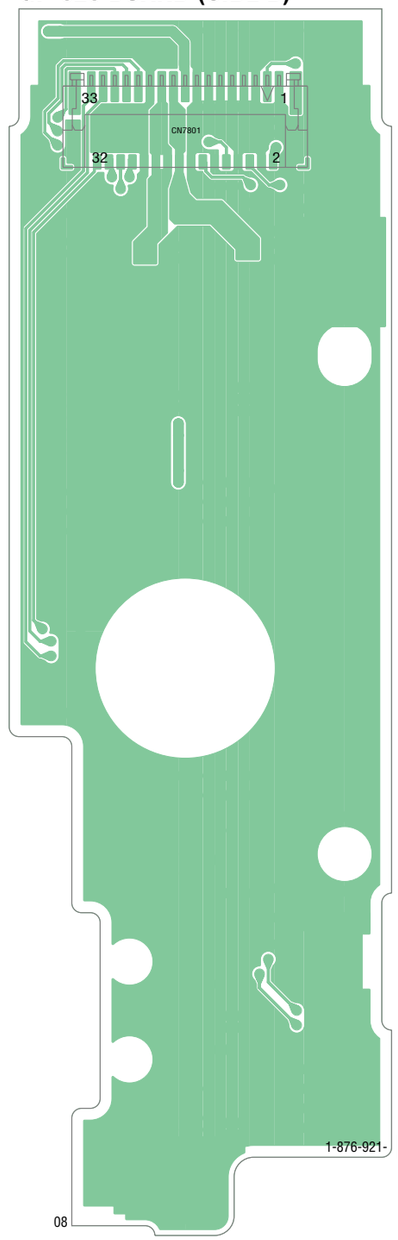
GP-025 (2 layers), HP-153 (2 layers), JK-376 (2 layers)

: Uses unleaded solder.

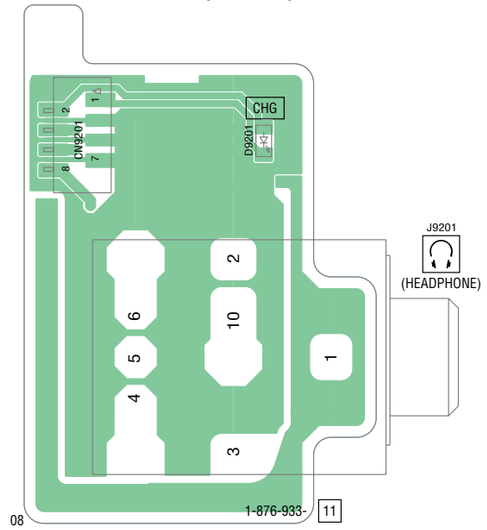
GP-025 BOARD (SIDE A)



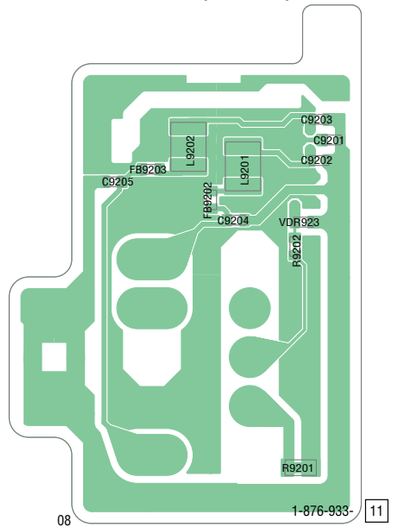
GP-025 BOARD (SIDE B)



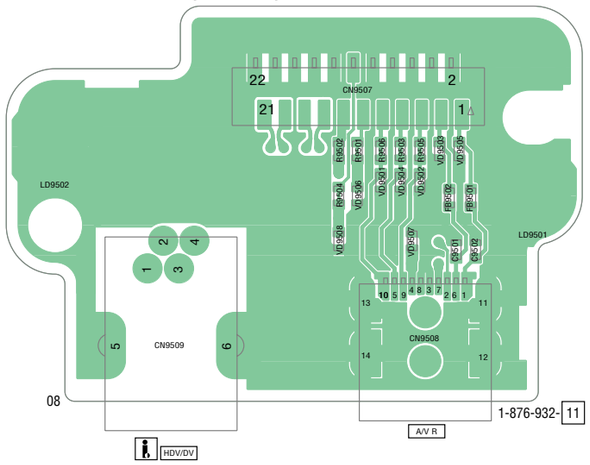
HP-153 BOARD (SIDE A)



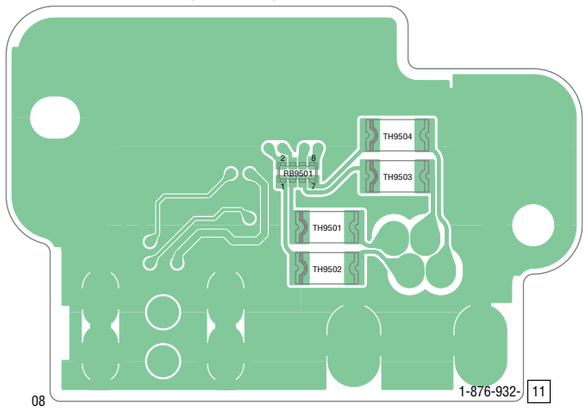
HP-153 BOARD (SIDE B)



JK-376 BOARD (SIDE A)



JK-376 BOARD (SIDE B)



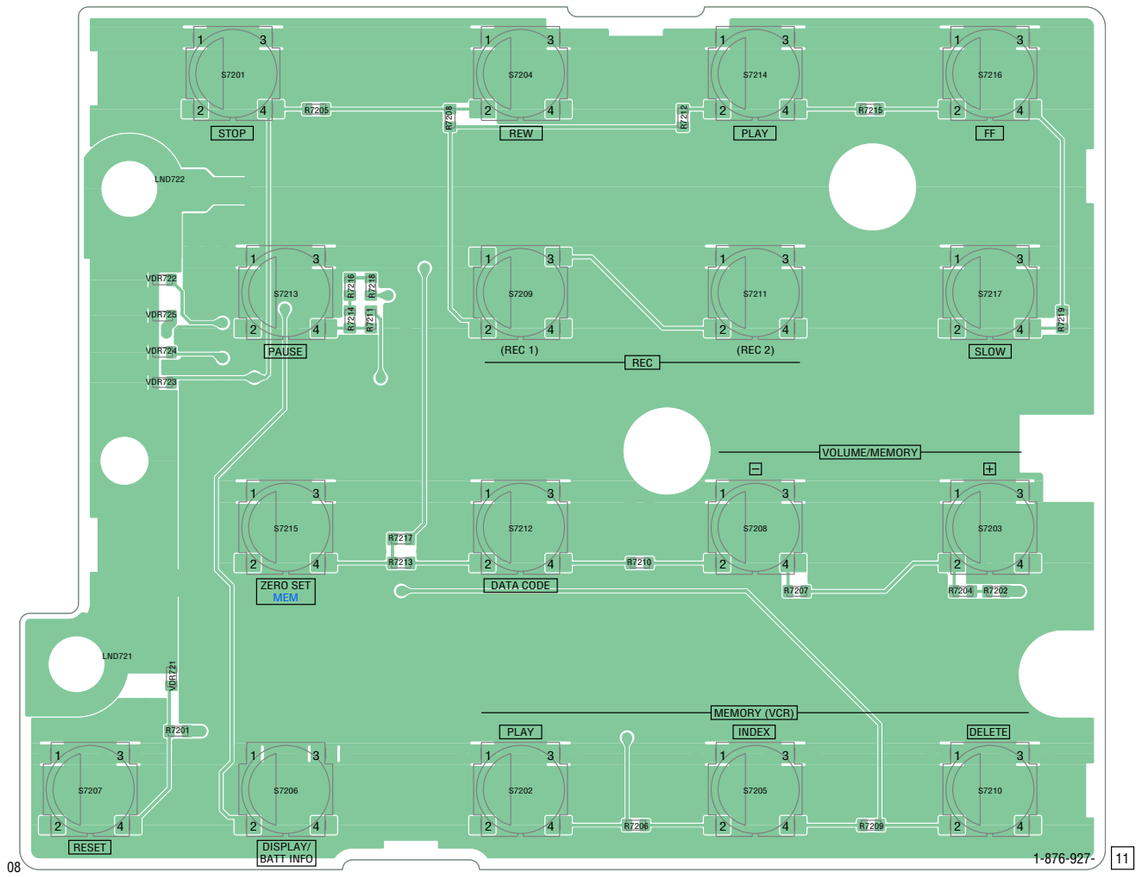
Ver. 1.1 2008.11

The changed portions from
Ver. 1.0 are shown in blue.

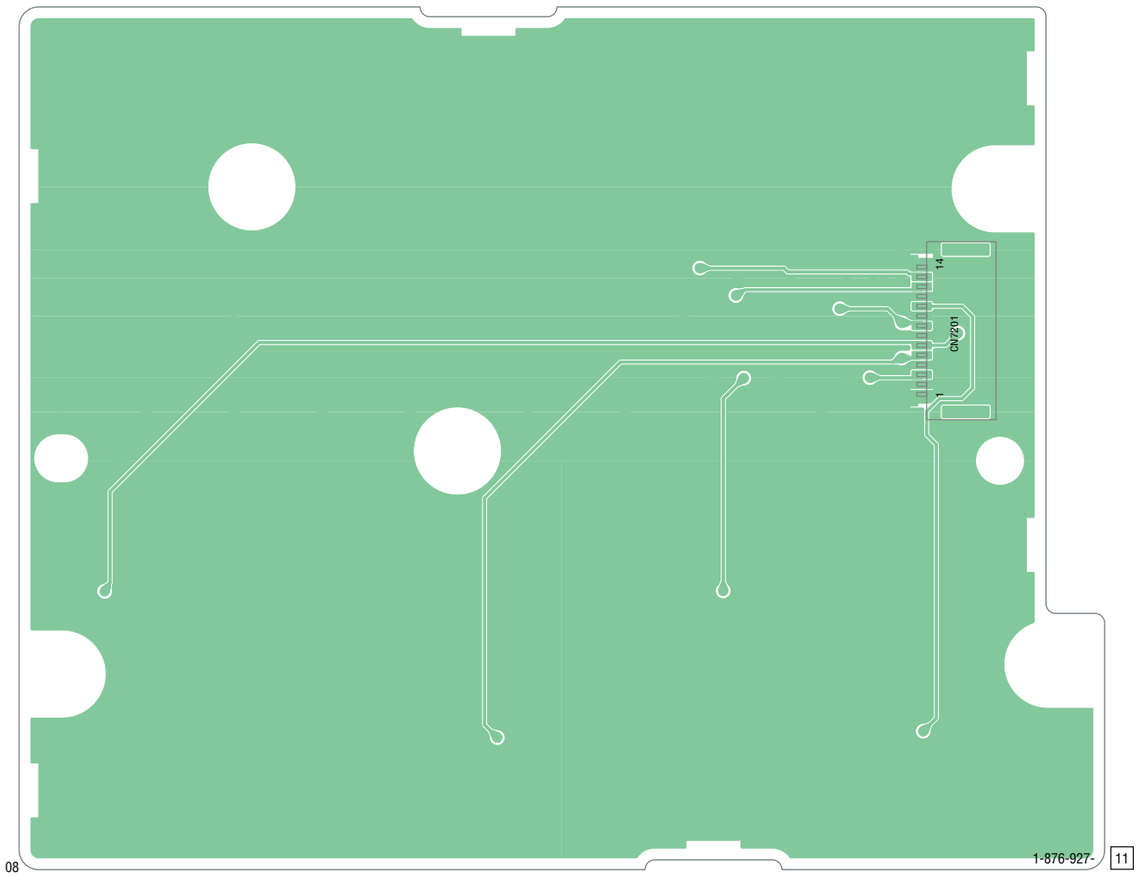
KY-105 (2 layers), MA-454 (2 layers)

: Uses unleaded solder.

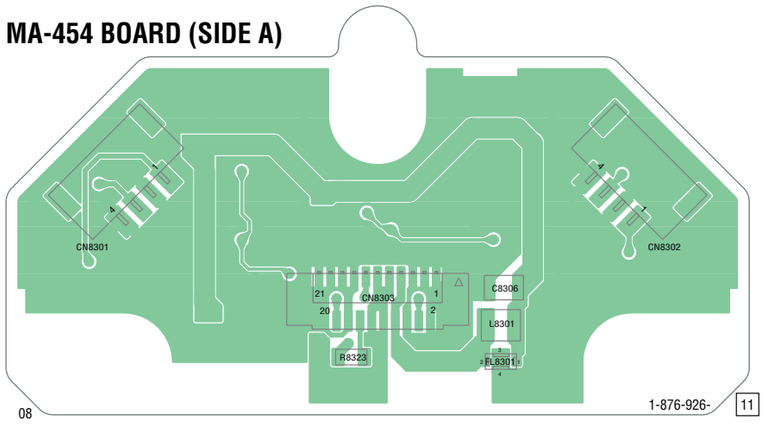
KY-105 BOARD (SIDE A)



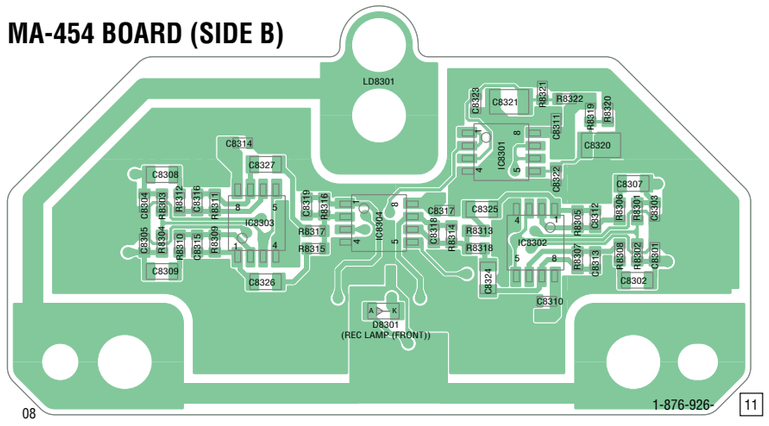
KY-105 BOARD (SIDE B)



MA-454 BOARD (SIDE A)



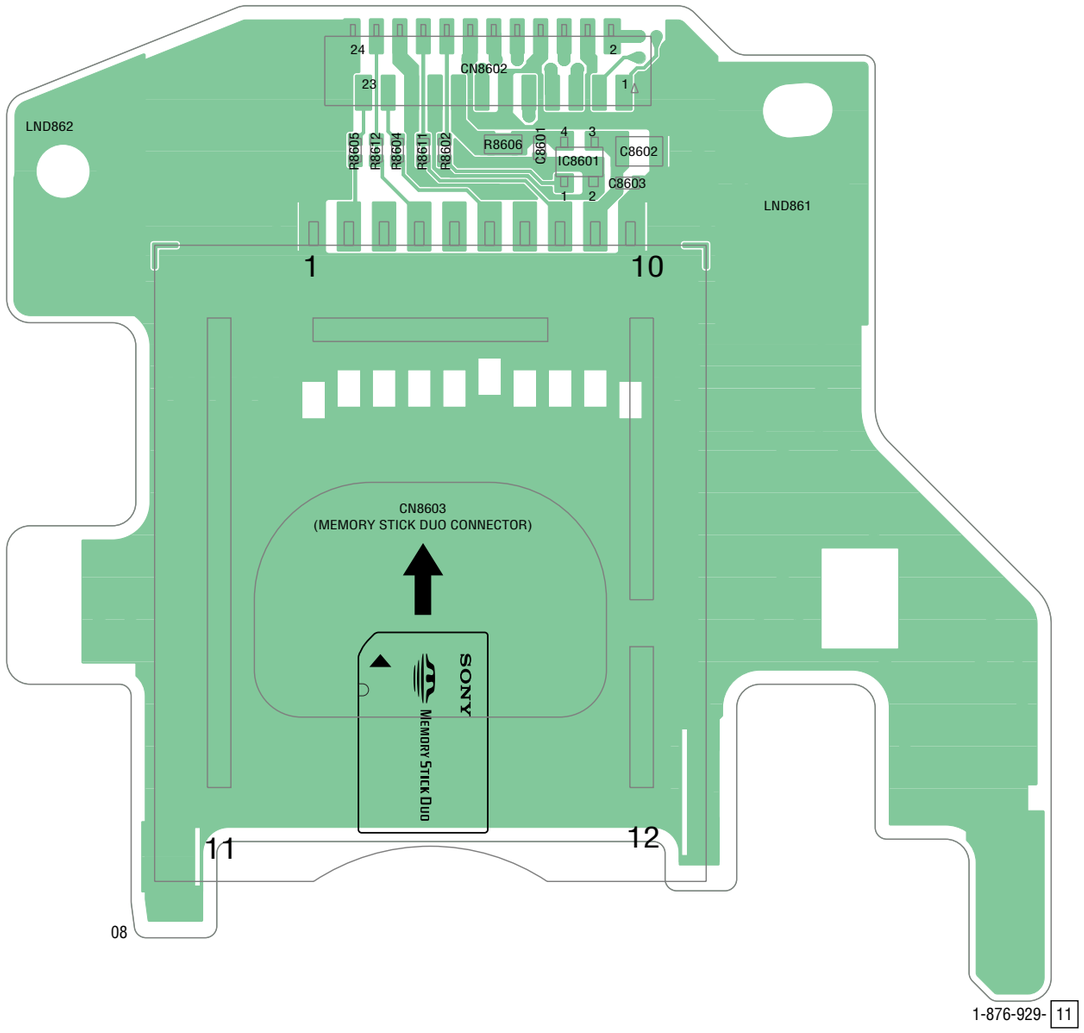
MA-454 BOARD (SIDE B)



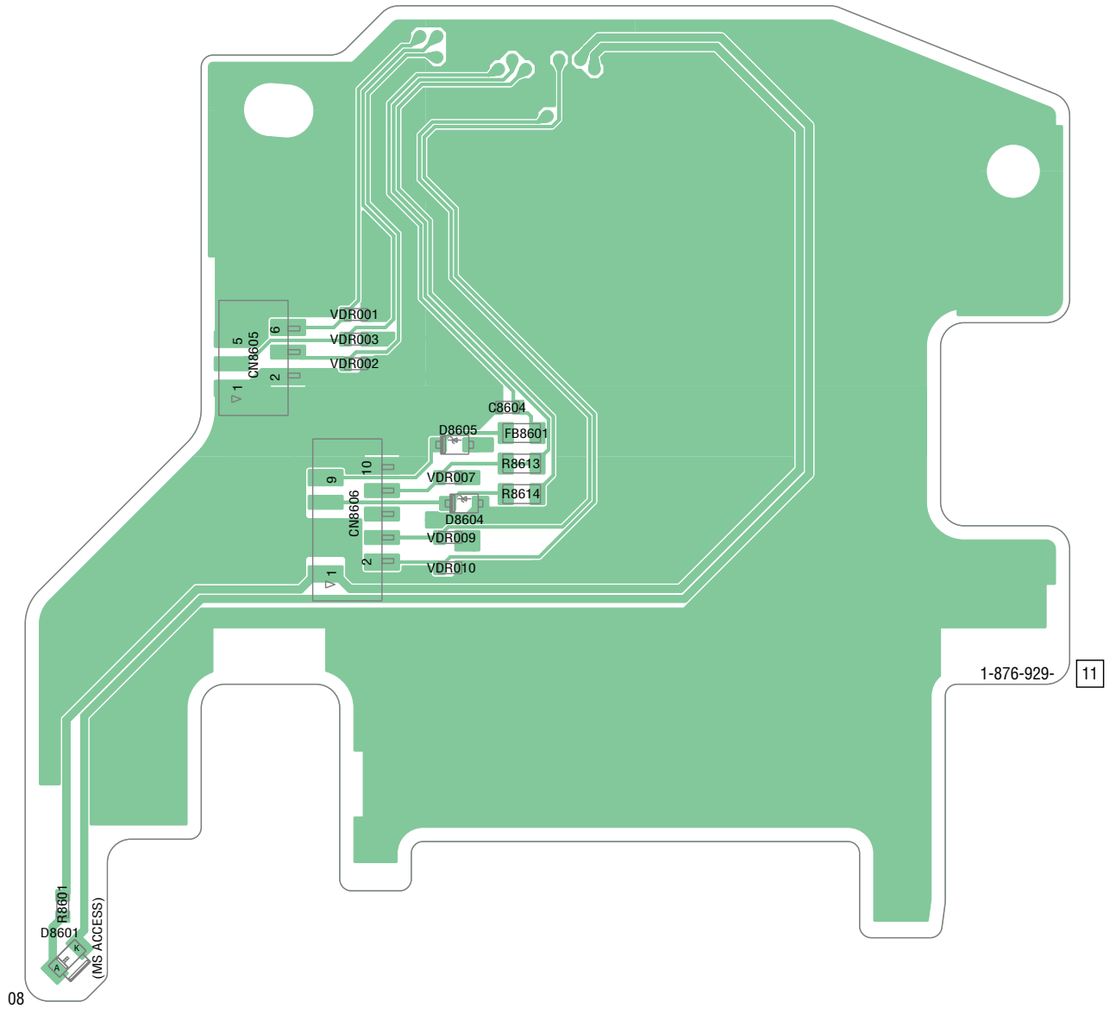
MS-405 (2 layers)

: Uses unleaded solder.

MS-405 BOARD (SIDE A)



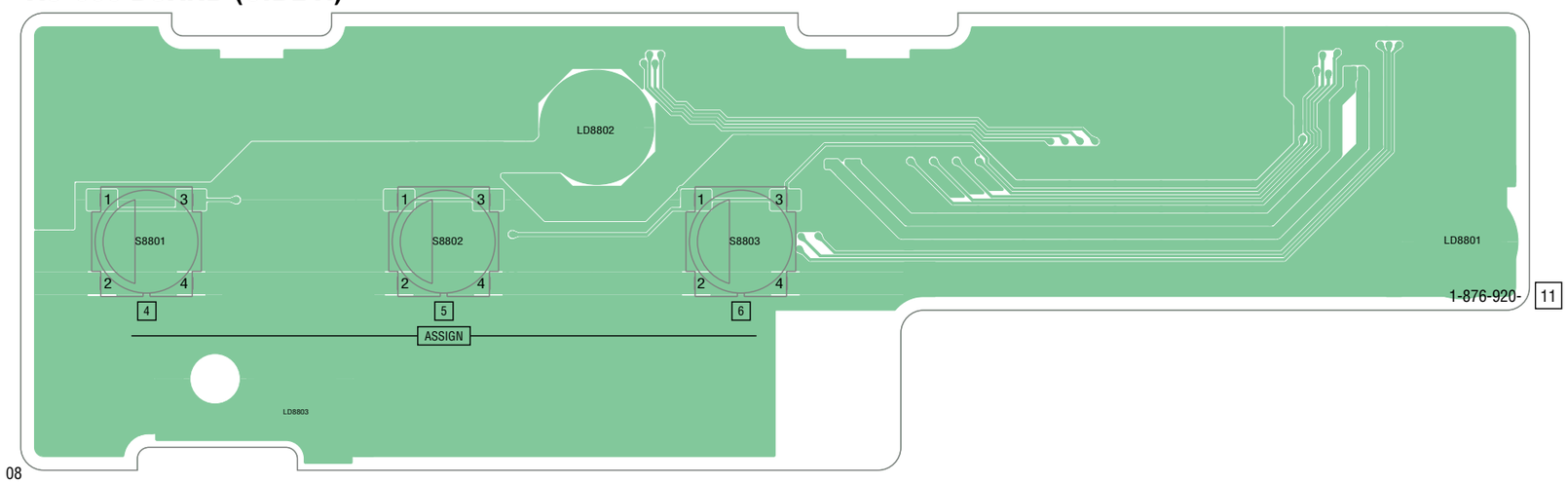
MS-405 BOARD (SIDE B)



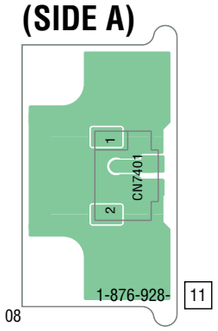
AS-060 (6 layers), HT-002 (2 layers), MJ-002 (6 layers)

: Uses unleaded solder.

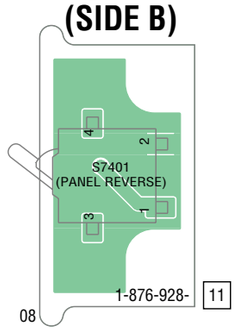
AS-060 BOARD (SIDE A)



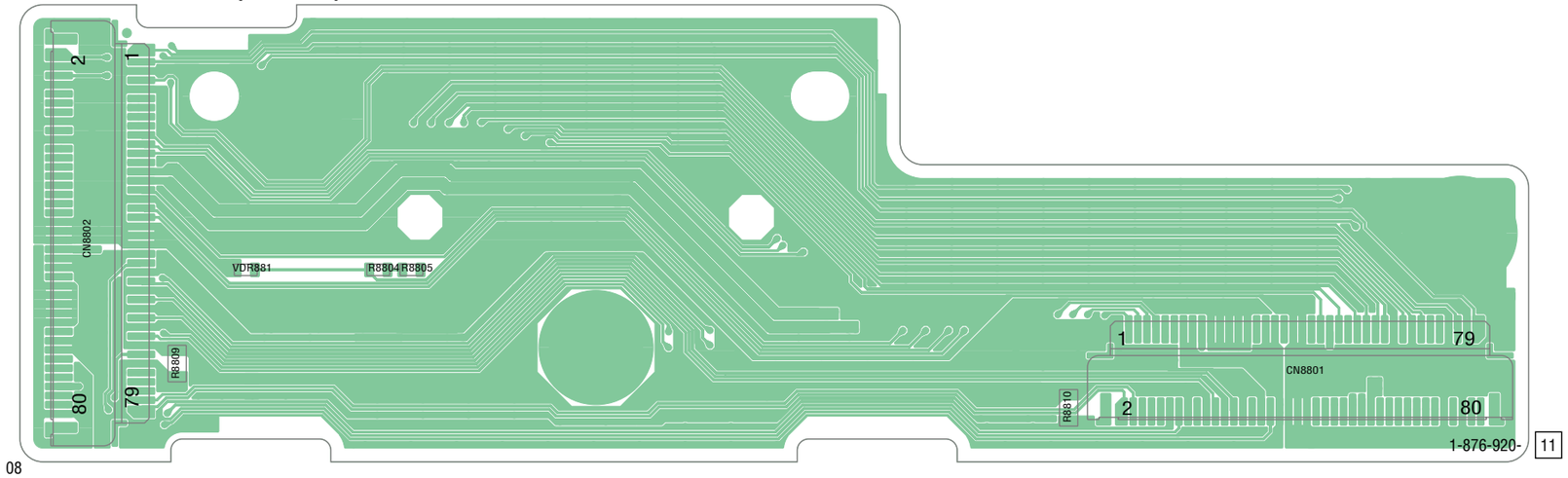
HT-002 BOARD (SIDE A)



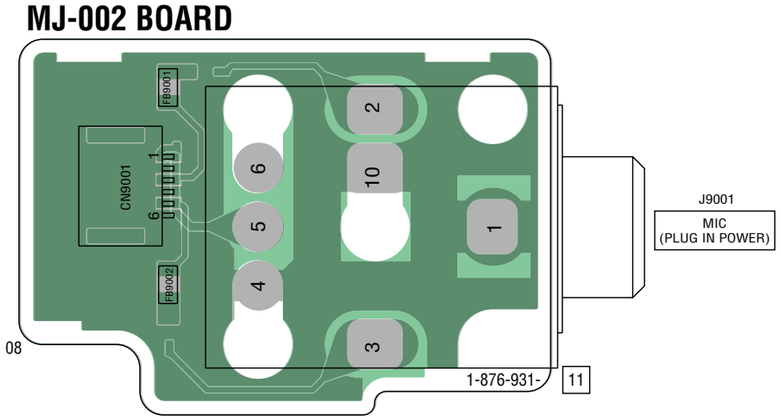
HT-002 BOARD (SIDE B)



AS-060 BOARD (SIDE B)



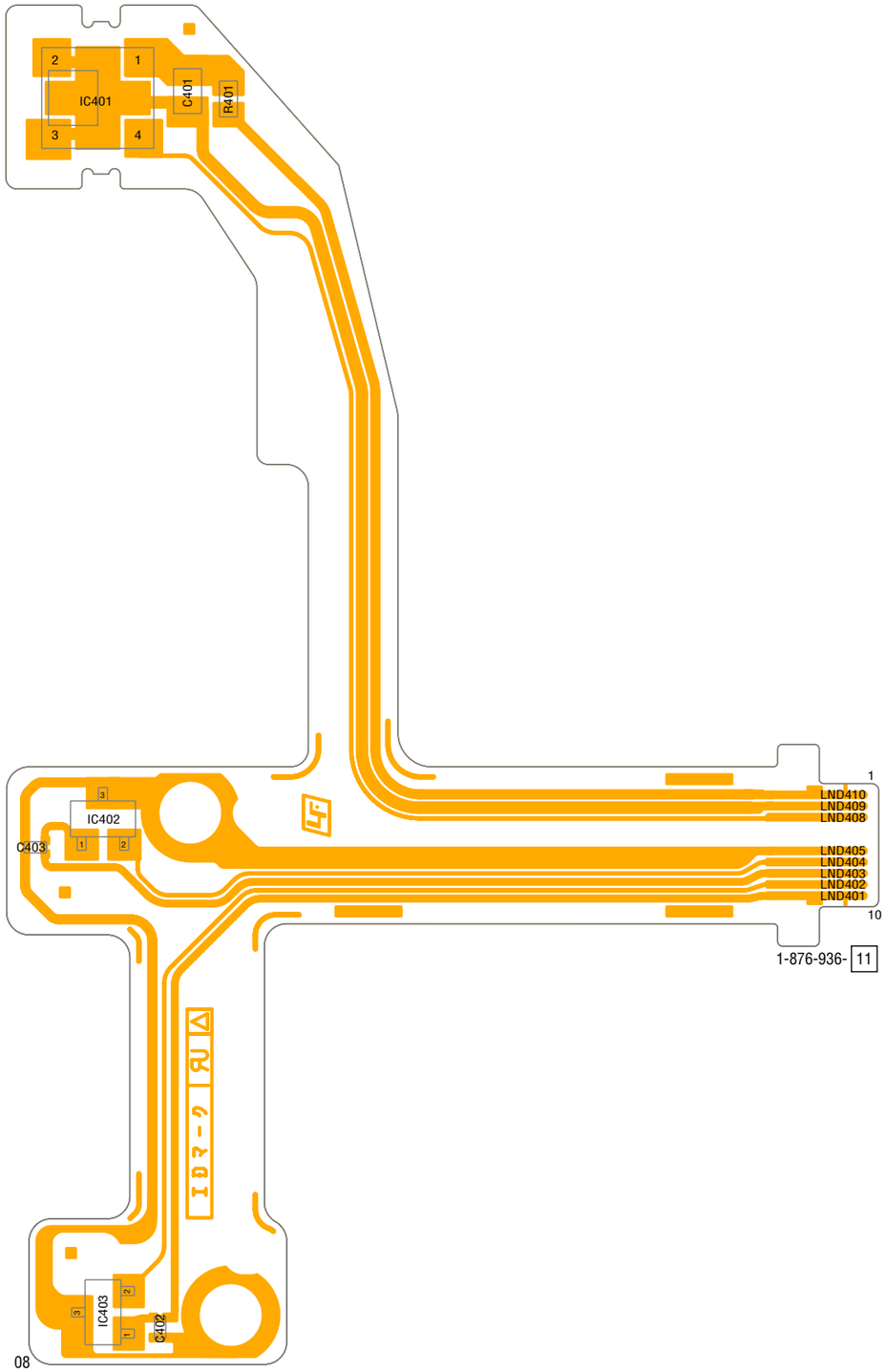
MJ-002 BOARD



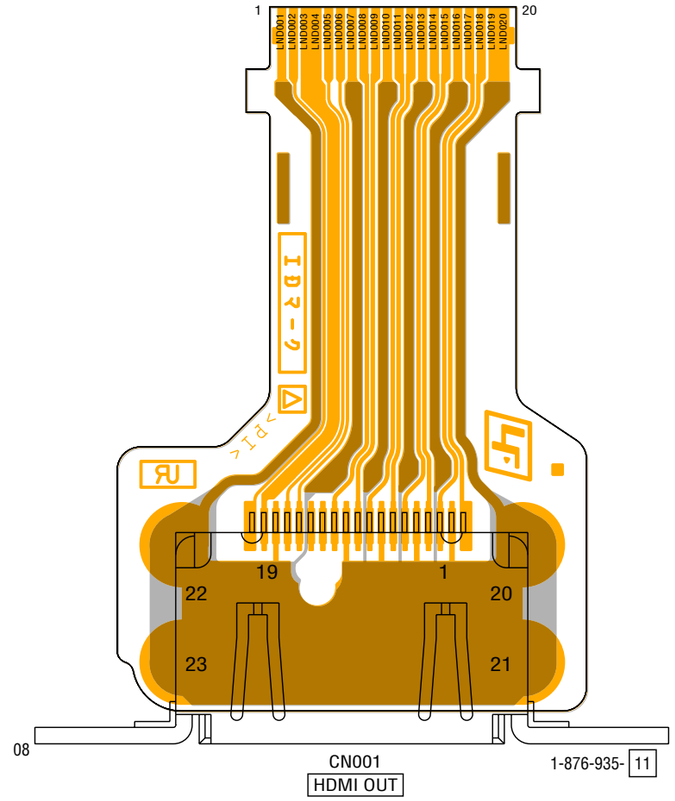
FP-966 (1 layer), FP-965 (2 layers) , FP-969 (1 layer)

: Uses unleaded solder.

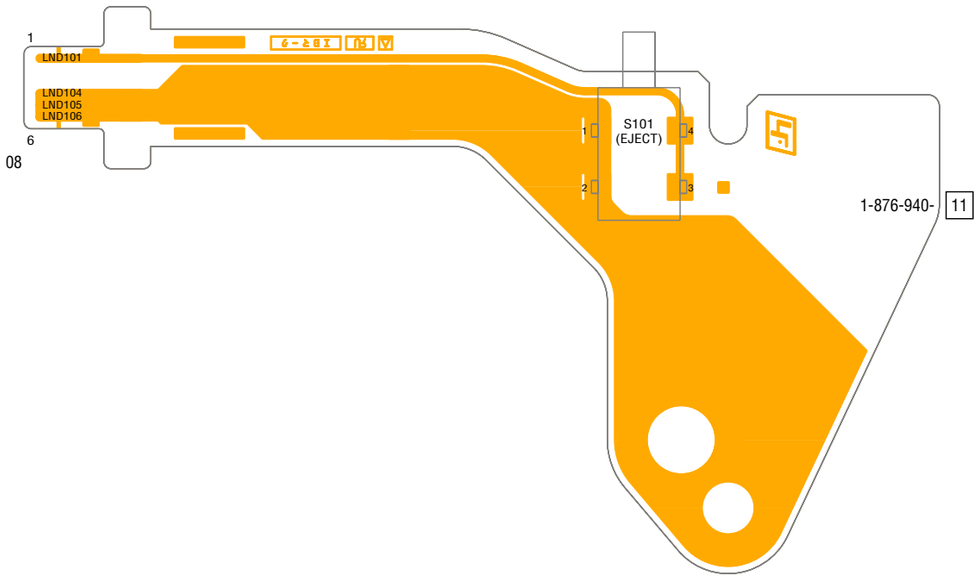
FP-966 FLEXIBLE BOARD



FP-965 FLEXIBLE BOARD



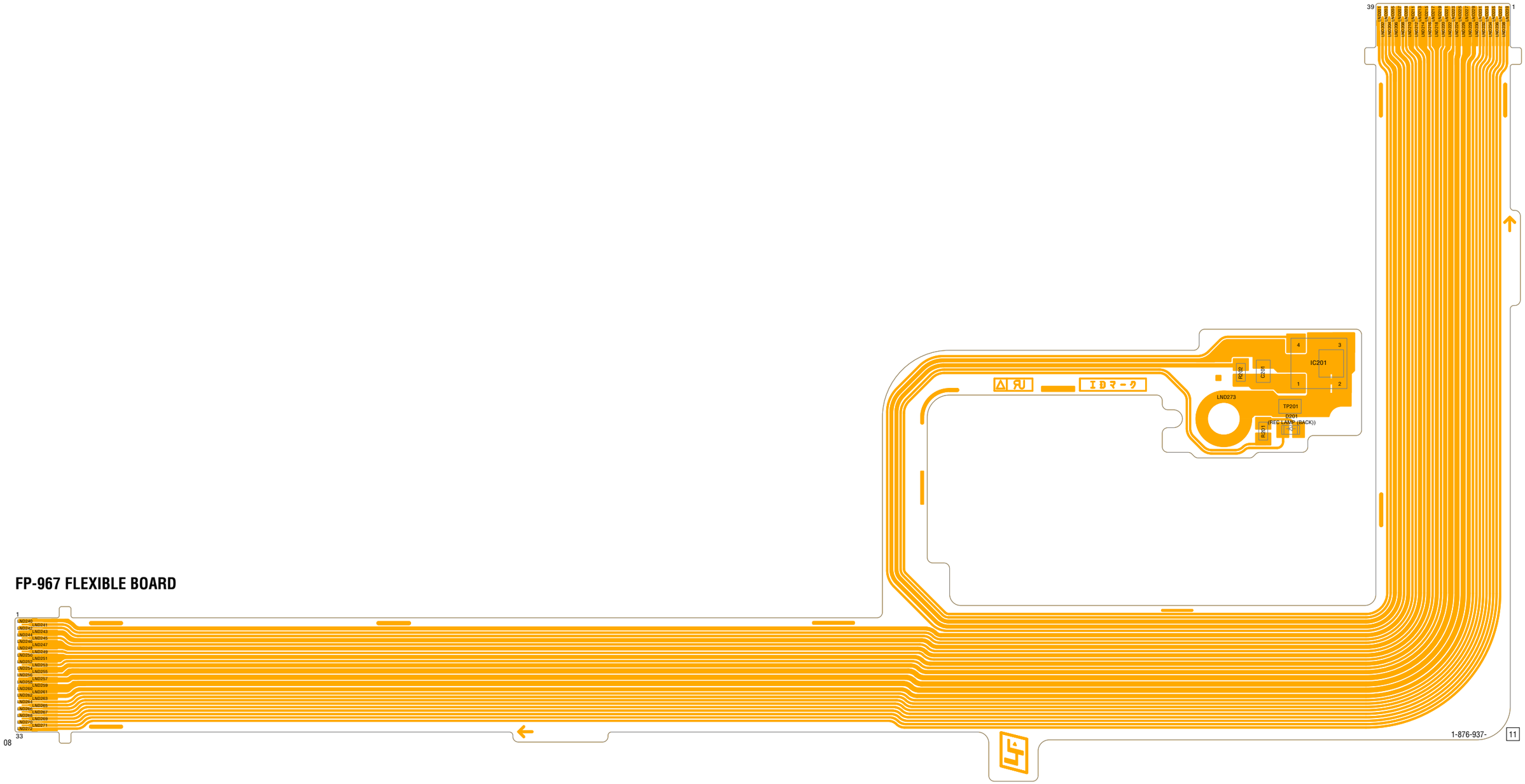
FP-969 FLEXIBLE BOARD



FP-967 (1 layer)

: Uses unleaded solder.

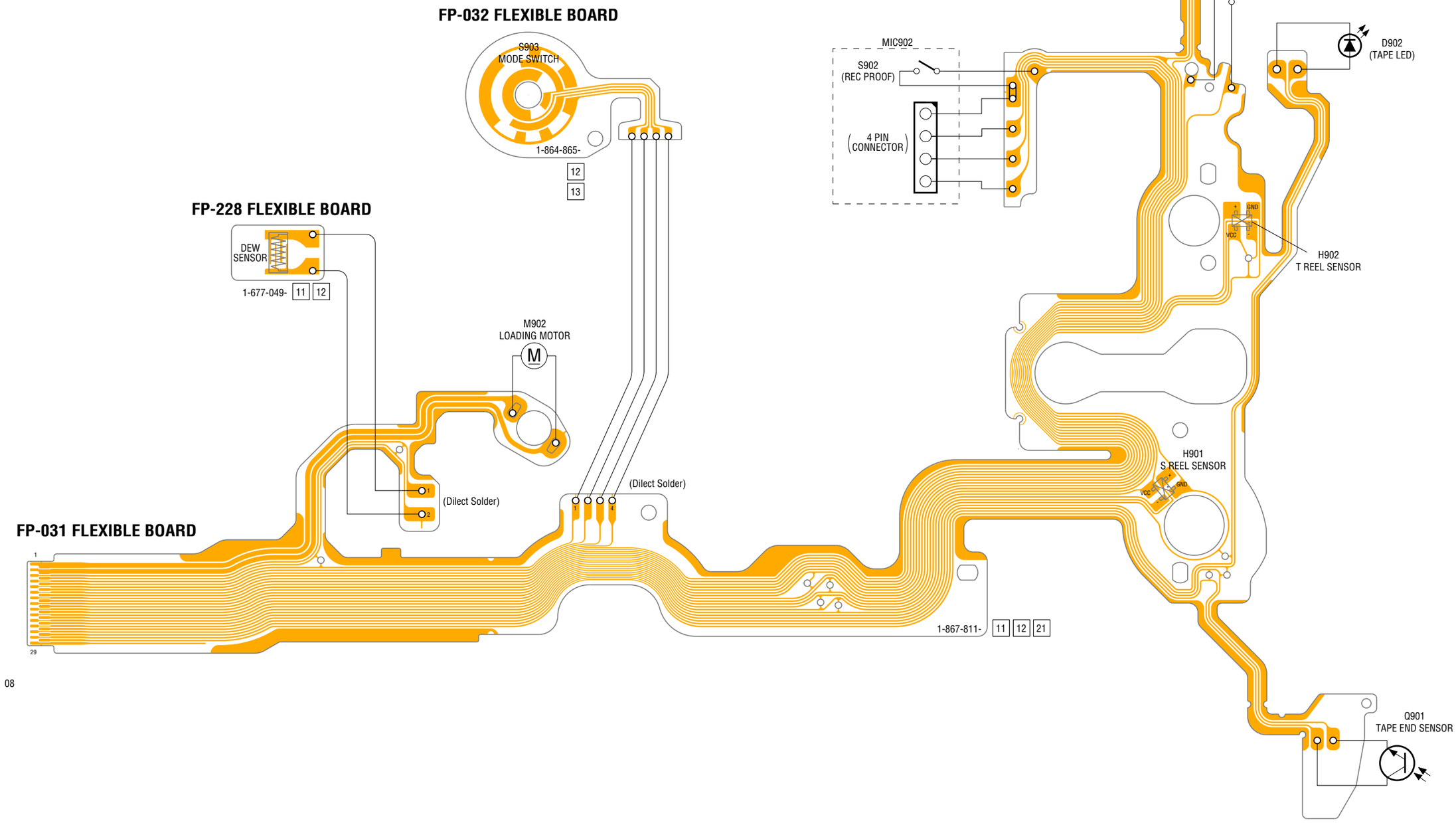
FP-967 FLEXIBLE BOARD



FP-031 (1 layer), FP-032 (1 layer), FP-228 (1 layer)

: Uses unleaded solder.

Note: The FP-031 and FP-032 are supplied as the assembled part of
the MD (N220) sub ass'y (S) A by attaching them with the adhesive agent.
These parts are not separately supplied because assembling of
these parts requires high accuracy.



08

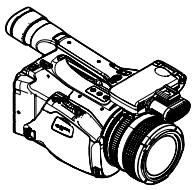
NOTE

5. REPAIR PARTS LIST (1/2)

TO (2/2)

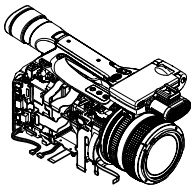
NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link EXPLODED VIEWS



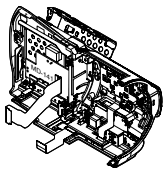
A

OVERALL SECTION-1



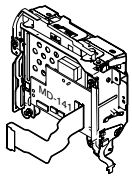
B

OVERALL SECTION-2



C

CABINET (R) SECTION

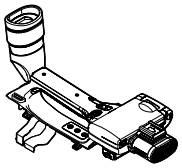


D

MD SECTION

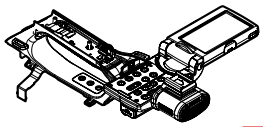
E

LENS SECTION



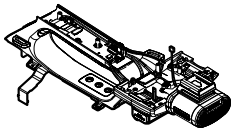
F

HANDLE SECTION-1



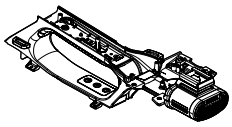
G

HANDLE SECTION-2



H

HANDLE SECTION-3

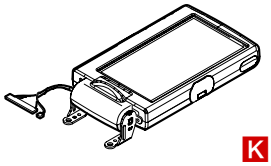


I

HANDLE SECTION-4

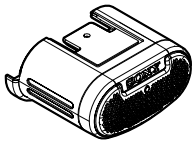
J

EVF SECTION



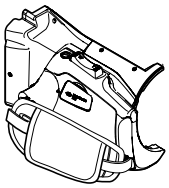
K

LCD SECTION



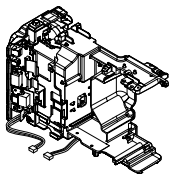
L

MICROPHONE SECTION



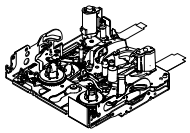
M

CABINET (L) SECTION



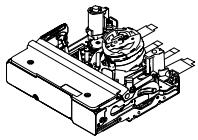
N

BT PANEL SECTION



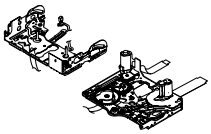
O

MECHANISM DECK SECITON



P

LS/MECHANICAL CHASSIS BLOCK ASSEMBLY-1



Q

LS/MECHANICAL CHASSIS BLOCK ASSEMBLY-2

NOTE

5. REPAIR PARTS LIST (2/2)

TO (1/2)

NOTE: Characters A to Z of the electrical parts list indicate location of exploded views in which the desired part is shown.

Link

ELECTRICAL PARTS LIST

ACCESSORIES

AS-060 BOARD I	FP-969 FLEXIBLE BOARD D	GY-014 BOARD E
CK-204 BOARD C	FP-971 FLEXIBLE BOARD M	HP-153 BOARD N
FP-031 FLEXIBLE BOARD Q	FP-973 FLEXIBLE BOARD A	HT-002 BOARD K
FP-032 FLEXIBLE BOARD Q	FP-974 FLEXIBLE BOARD J	JK-376 BOARD N
FP-228 FLEXIBLE BOARD Q	FP-975 FLEXIBLE BOARD L	KY-105 BOARD G
FP-776 FLEXIBLE BOARD J	FP-981 FLEXIBLE BOARD I	MA-454 BOARD L
FP-965 FLEXIBLE BOARD N	FP-982 FLEXIBLE BOARD I	MJ-002 BOARD H
FP-966 FLEXIBLE BOARD G	FP-983 FLEXIBLE BOARD D	MS-405 BOARD M
FP-967 FLEXIBLE BOARD H	GP-025 BOARD H	

5. REPAIR PARTS LIST

(ENGLISH)

NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

(JAPANESE)

【使用上の注意】

- **ここに記載されている部品は, 補修用部品であるため, 回路図及びセットに付いている部品と異なる場合があります。**
- **-XX, -Xは標準化部品のため, セットに付いている部品と異なる場合があります。**
- ***印の部品は常備在庫しておりません。**
- **コンデンサの単位でuFはµFを示します。**
- **抵抗の単位Ωは省略してあります。**
  金　　被：金属被膜抵抗。
  サンキン：酸化金属被膜抵抗。
- **インダクタの単位でuHはµHを示します。**
- **半導体の名称でuA..., uPA..., uPB..., uPC..., uPD...等はそれぞれµA..., µPA..., µPB..., µPC..., µPD...を示します。**

お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定してください。

⚠印の部品，または⚠印付の点線で囲まれた部品は，安全性を維持するために，重要な部品です。
従って交換時は,必ず指定の部品を使用してください。

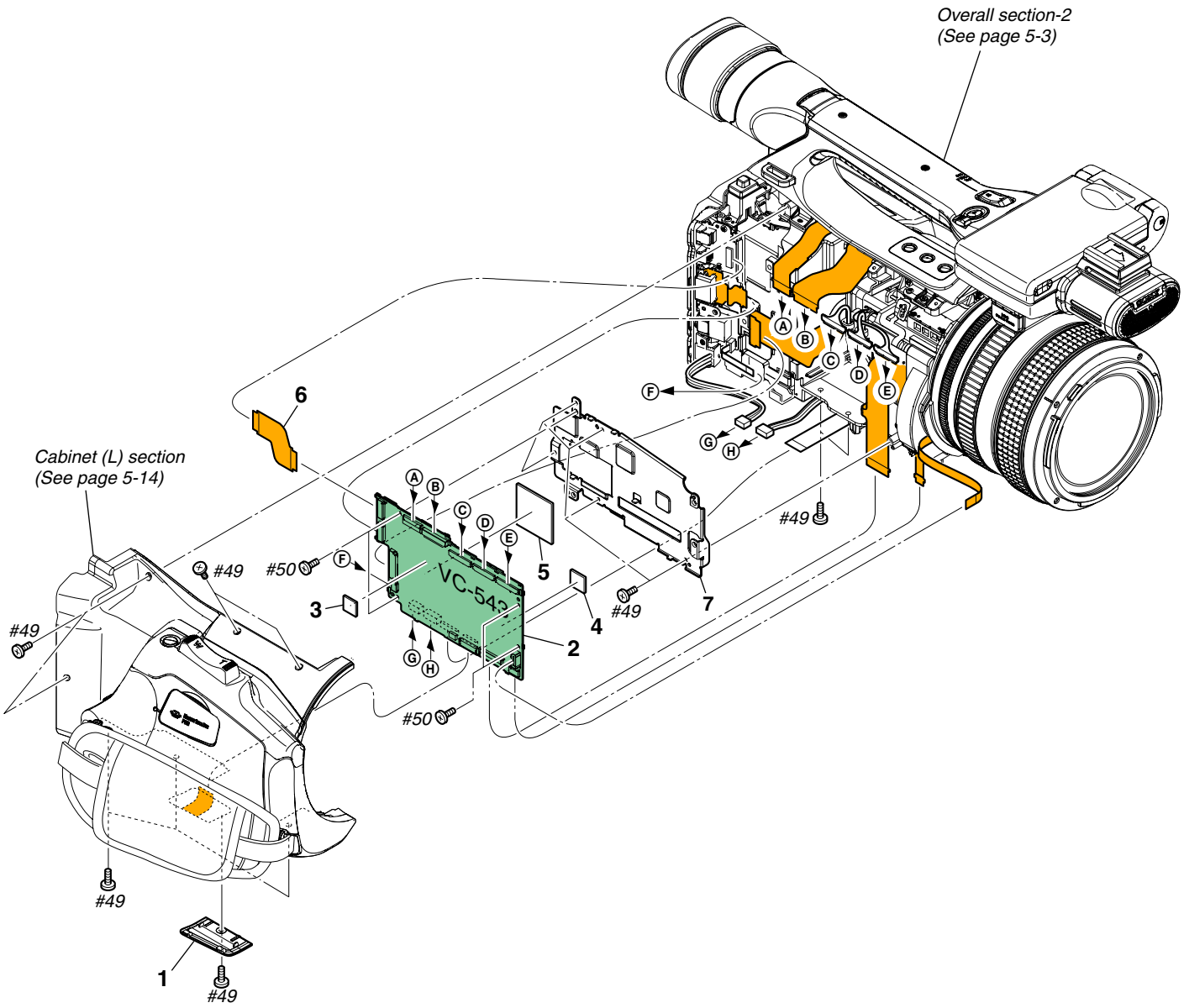
- Abbreviation
  AUS : Australian model
  CH : Chinese model
  CND : Canadian model
  HK : Hong Kong model
  J : Japanese model
  JE : Tourist model
  KR : Korea model

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

DISASSEMBLY HARDWARE LIST

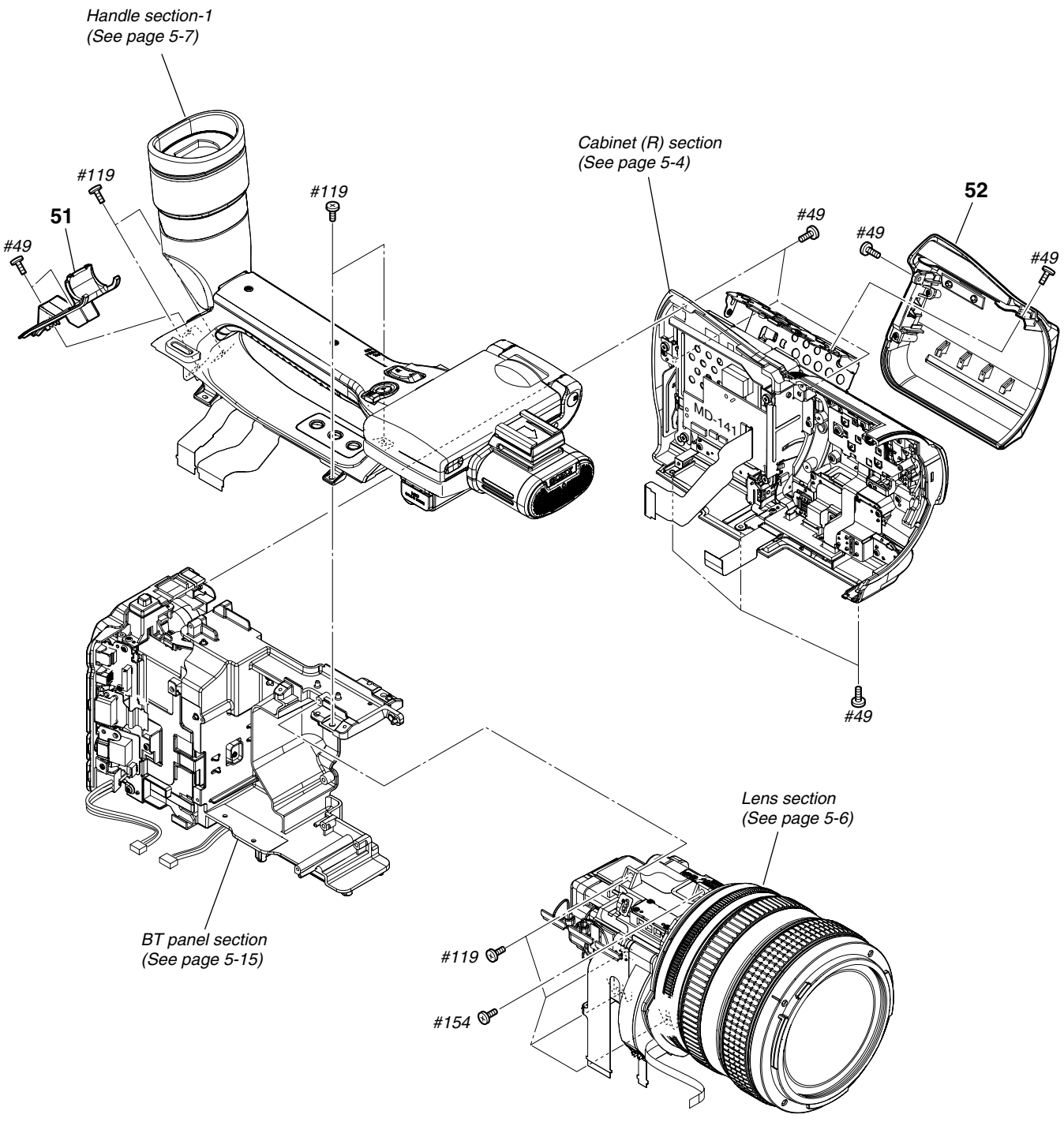
5-1-1. OVERALL SECTION-1



Ref. No.	Part No.	Description
1	4-119-235-01	LID, CPC
2	A-1599-934-A	VC-543 BOARD, COMPLETE (SERVICE) (FX1000)
2	A-1599-935-A	VC-543 BOARD, COMPLETE (SERVICE) (FX1000E)
3	4-121-128-01	SHEET (VC), ELECTROSTATIC
4	4-119-238-01	SHEET (1212), VC RADIATION
5	4-119-362-01	SHEET (2828), LENS RADIATION
6	1-876-944-11	FP-973 FLEXIBLE BOARD
7	4-119-236-01	FRAME, MAIN
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)

5-1-2. OVERALL SECTION-2

DISASSEMBLY HARDWARE LIST



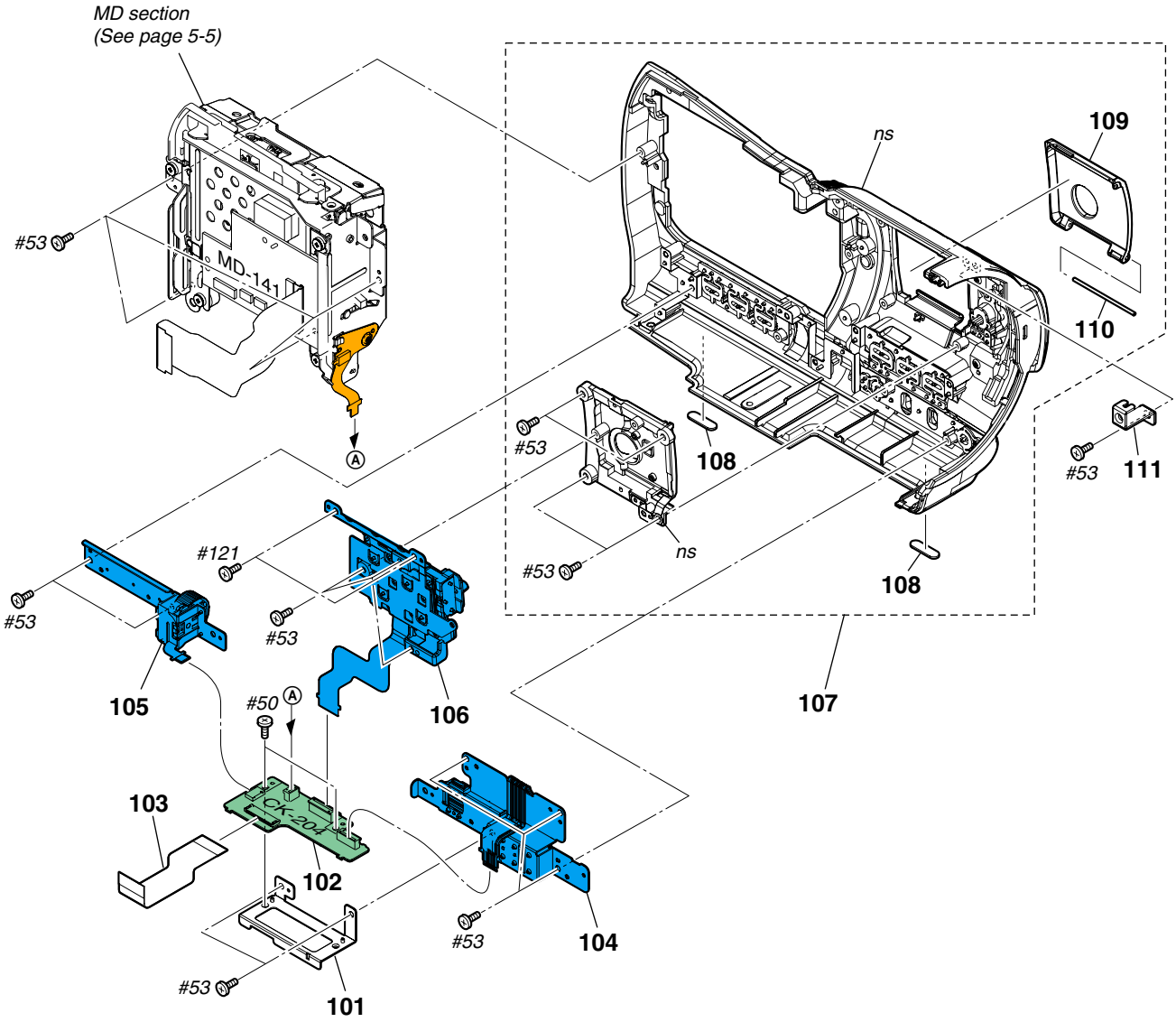
Ref. No.	Part No.	Description
51	X-2320-857-1	COVER (24000) ASSY, (REAR)
52	X-2320-869-1	LID (24000) ASSY, CS

Ref. No.	Part No.	Description
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#119	7-627-556-58	SCREW +P 2.6X5 (Black)
#154	7-627-556-97	SCREW, PRECISION +P2.6X8 TYPE 1 (Silver)

5-1-3. CABINET (R) SECTION

ns: not supplied

DISASSEMBLY HARDWARE LIST

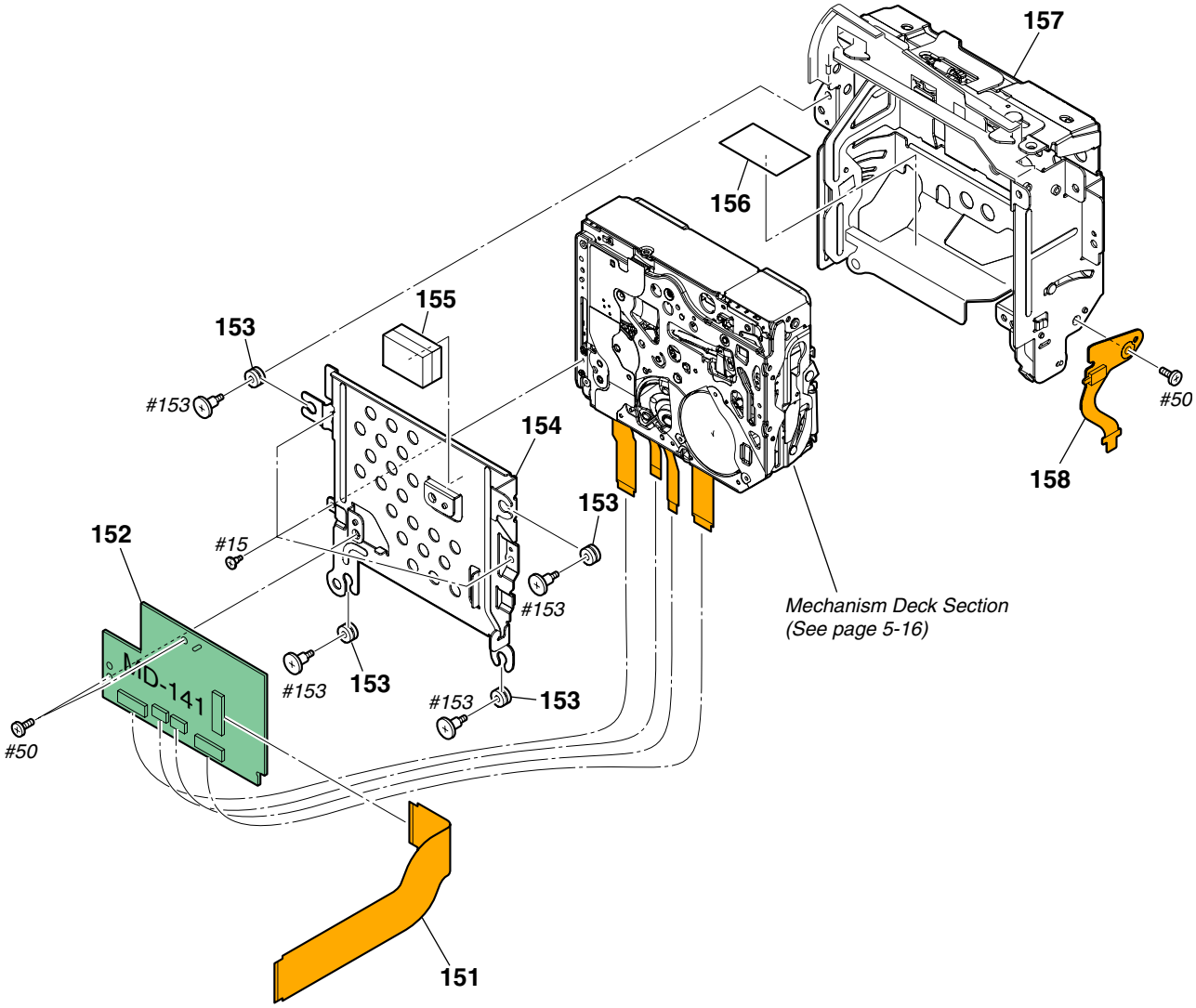


Ref. No.	Part No.	Description
* 101	4-119-384-01	PLATE, CK FIXED
102	A-1599-835-A	CK-204 BOARD, COMPLETE
103	1-836-005-11	CABLE, FLEXIBLE FLAT (FFC-171)
104	1-480-866-11	SWITCH BLOCK, CONTROL (CF24000)
105	1-480-867-11	SWITCH BLOCK, CONTROL (KP24000)
106	1-480-865-11	SWITCH BLOCK, CONTROL (AU24000)
107	X-2320-866-1	CABINET (R (24000)) ASSY
108	2-178-805-01	FOOT, RUBBER

Ref. No.	Part No.	Description
109	4-119-388-01	LID (24000), AL
* 110	4-119-404-01	SHAFT, AL
* 111	4-119-383-01	PLATE, CABINET (R) FIXED
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)
#121	3-080-205-11	SCREW, TAPPING, P2 (Silver)

5-1-4. MD SECTION

DISASSEMBLY HARDWARE LIST

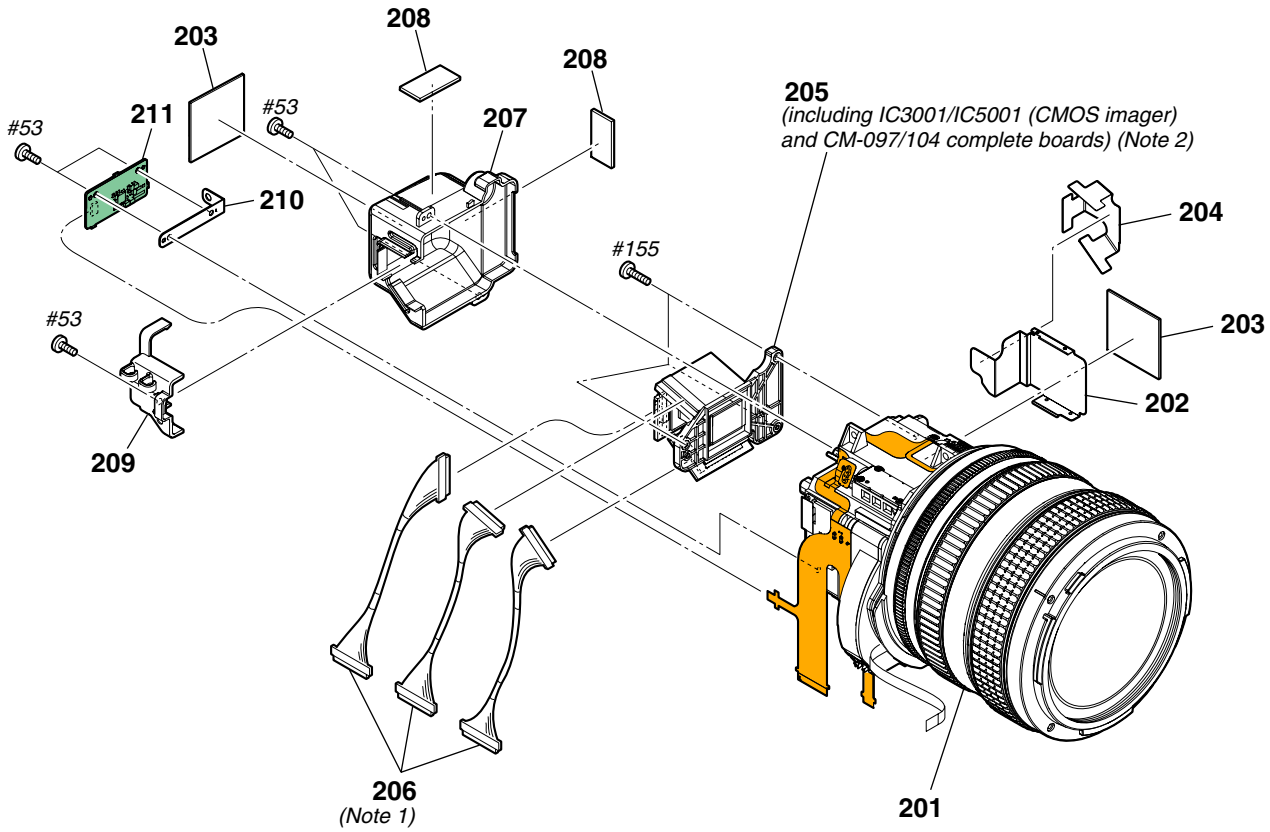


Ref. No.	Part No.	Description
151	1-876-954-11	FP-983 FLEXIBLE BOARD
152	A-1599-832-A	MD-141 BOARD, COMPLETE
153	3-059-809-01	DAMPER, MD
154	X-2320-872-1	FRAME ASSY, MD
* 155	2-673-770-01	GASKET (D)

Ref. No.	Part No.	Description
* 156	4-121-964-01	SHEET, MD INSULATING
157	X-2320-867-1	FRAME ASSY, CS
158	A-1599-833-A	FP-969 FLEXIBLE BOARD, COMPLETE
#15	3-062-214-01	SCREW (M1.4X1.5)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#153	3-059-718-01	SCREW (M1.4X1.5) (Silver)

5-1-5. LENS SECTION

HARDWARE LIST



Note 1: ハーネス（同軸ケーブル）の交換時は2-1ページの“ Note for disconnecting the harness (coaxial cable) ”を参照してください。

Note 1: Refer to page 2-1 “Note for disconnecting the harness (coaxial cable)” when changing the harness (coaxial cable).

Note 2: イメージャの交換時は4-4ページの“ イメージャ交換時の注意 ”を必ずお読みください。

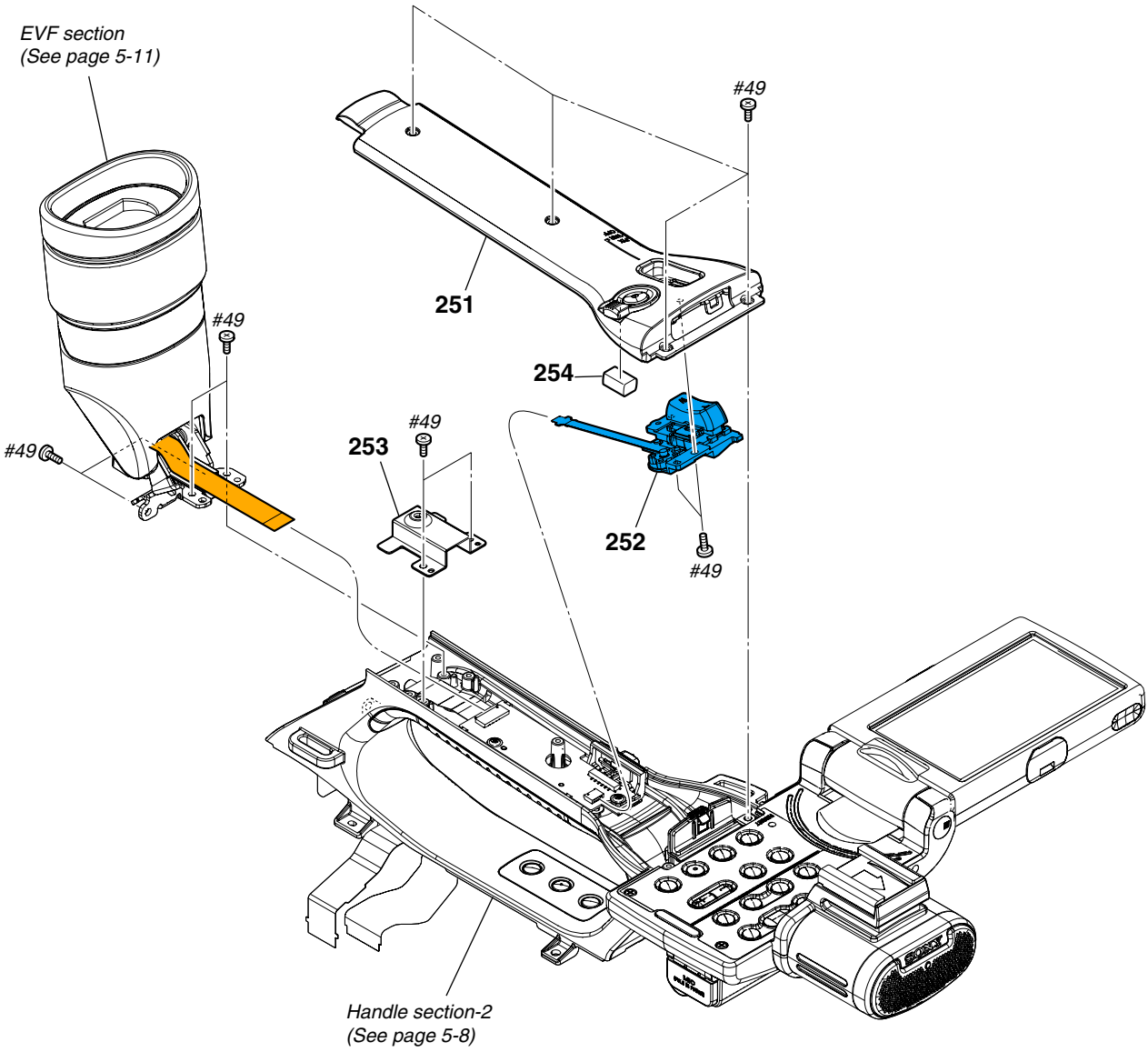
Note 2: Be sure to read “Precuations for Replacement of Imager” on page 4-3 when changing the imager.

Ref. No.	Part No.	Description
201	1-788-775-21	LENS, VIDEO CF0021
* 202	4-119-361-01	HEAT SINK, LENS
203	4-119-362-01	SHEET (2828), LENS RADIATION
* 204	4-119-360-01	SHEET, CM RADIATION
205	A-1566-526-A	DEVICE (SERVICE), PRISM (including IC3001/IC5001 (CMOS imager) and CM-097/104 complete boards) (Note 2)
206	1-966-281-11	HARNESS (COAXIAL CABLE) (Note 1)

Ref. No.	Part No.	Description
* 207	4-119-357-01	COVER (A), LIGHT INTERCEPTION
208	4-119-356-01	SHEET (1122), LENS RADIATION
* 209	4-119-358-01	COVER (B), LIGHT INTERCEPTION
* 210	4-119-359-01	PLATE, GY GROUND
211	A-1602-003-A	GY-014 BOARD, COMPLETE (SERVICE)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)
#155	3-080-204-31	SCREW, TAPPING, P2 (Black)

5-1-6. HANDLE SECTION-1

DISASSEMBLY HARDWARE LIST



Ref. No.	Part No.	Description
251	X-2320-854-1	CABINET (24000) ASSY, (UPPER)
252	1-480-298-11	SWITCH BLOCK, CONTROL (GZ92000)
253	4-119-281-01	BRACKET, HANDLE (UPPER) CABINET
* 254	3-700-682-01	CUSHION (MIC)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)

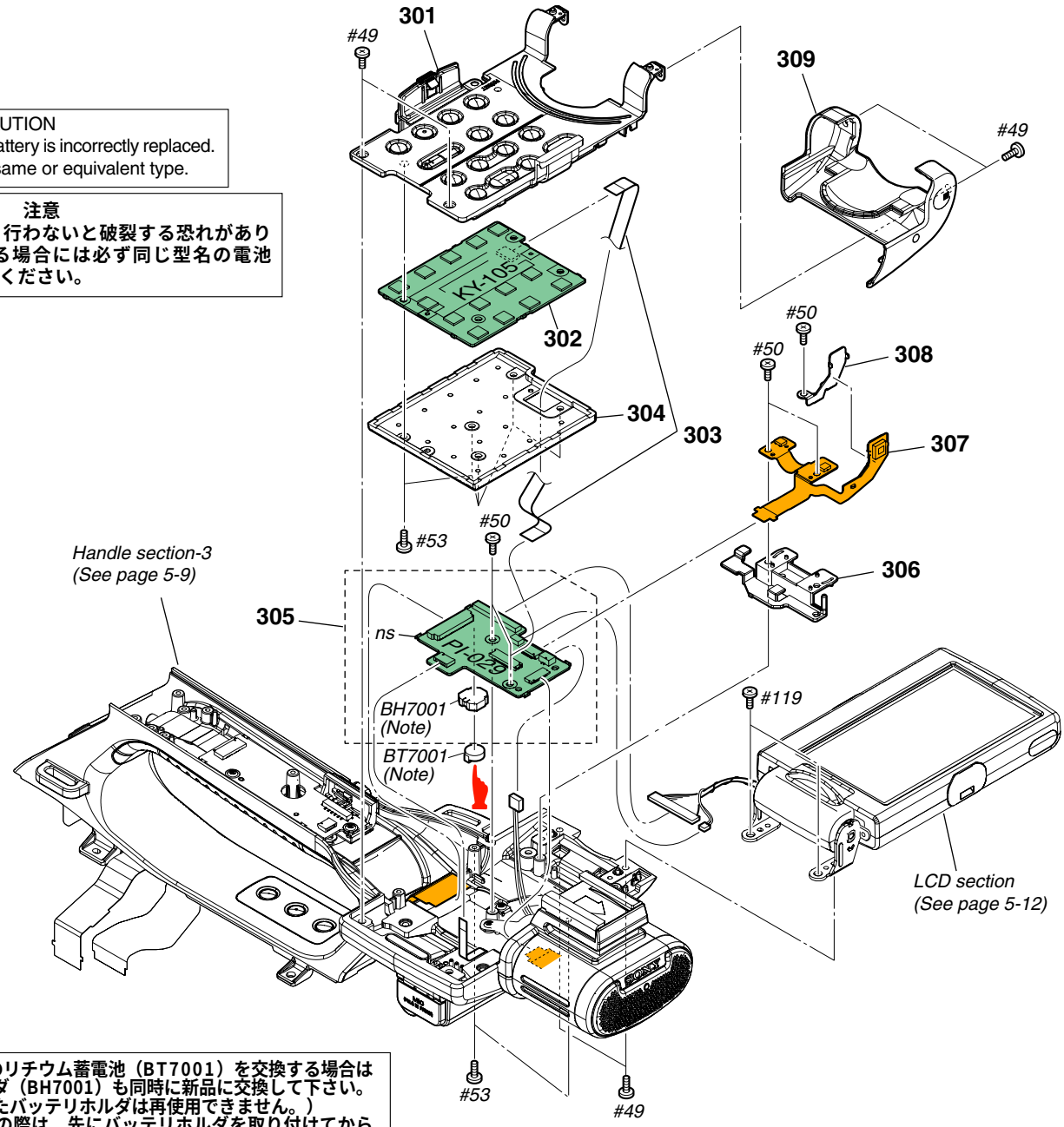
5-1-7. HANDLE SECTION-2

ns: not supplied

DISASSEMBLY HARDWARE LIST

CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

注意
電池の交換は，正しく行わないと破裂する恐れがあります。電池を交換する場合には必ず同じ型名の電池又は同等品と交換してください。



: *BT7001 (LITHIUM STORAGE BATTERY) Board on the mount position. (See page 4-63.)*

ノート: PI-029基板のリチウム蓄電池（BT7001）を交換する場合はバッテリホルダ（BH7001）も同時に新品に交換して下さい。（一度使用したバッテリホルダは再使用できません。）部品取り付けの際は，先にバッテリホルダを取り付けてからリチウム蓄電池を装着して下さい。

Note : Replace the battery holder (BH7001) together when replacing the lithium storage battery (BT7001) on the PI-029 board. (The battery holder removed once cannot be used again.) When mounting these parts, mount new battery holder first and attach new lithium storage battery next.

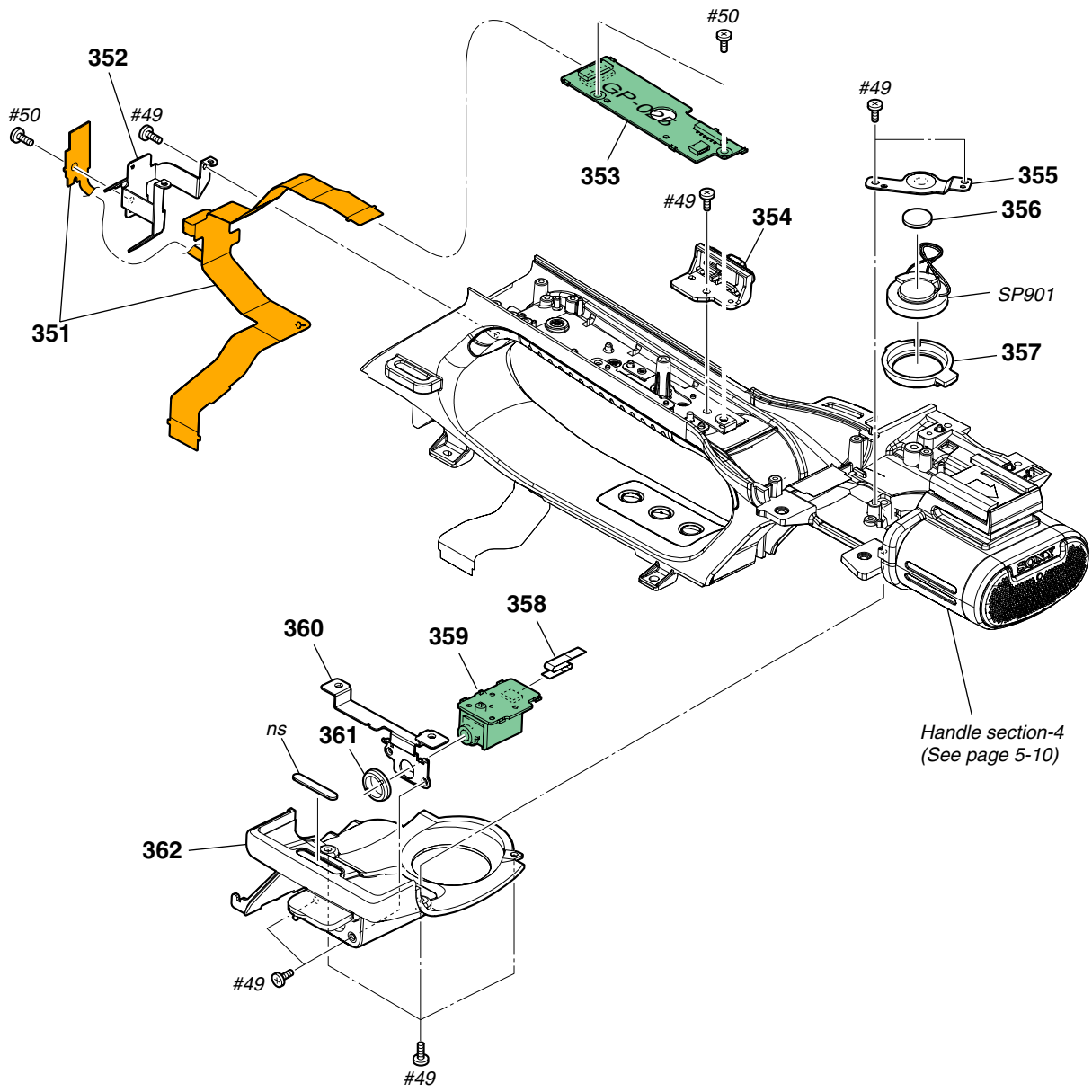
• Refer to page 5-1 for mark ⚠.

Ref. No.	Part No.	Description
301	X-2320-855-1	PANEL (24000) ASSY, CONTROL
302	A-1599-625-A	KY-105 BOARD, COMPLETE
303	1-836-004-11	CABLE, FLEXIBLE FLAT (FFC-170)
* 304	3-288-540-01	COVER (BB)
305	A-1599-622-A	PI-029 BOARD, COMPLETE
306	4-119-279-01	HOLDER, FLEXIBLE
307	A-1599-641-A	FP-966 FLEXIBLE BOARD, COMPLETE
308	X-2188-609-1	FIXED (759) ASSY
309	X-2320-856-1	COVER (24000) ASSY, (FRONT)
⚠*BH7001	1-756-615-51	HOLDER, BATTERY (Note)
⚠BT7001	1-756-134-12	BATTERY, STORAGE, LITHIUM (Note)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)
#119	7-627-556-58	SCREW +P 2.6X5 (Black)

5-1-8. HANDLE SECTION-3

ns: not supplied

DISASSEMBLY HARDWARE LIST



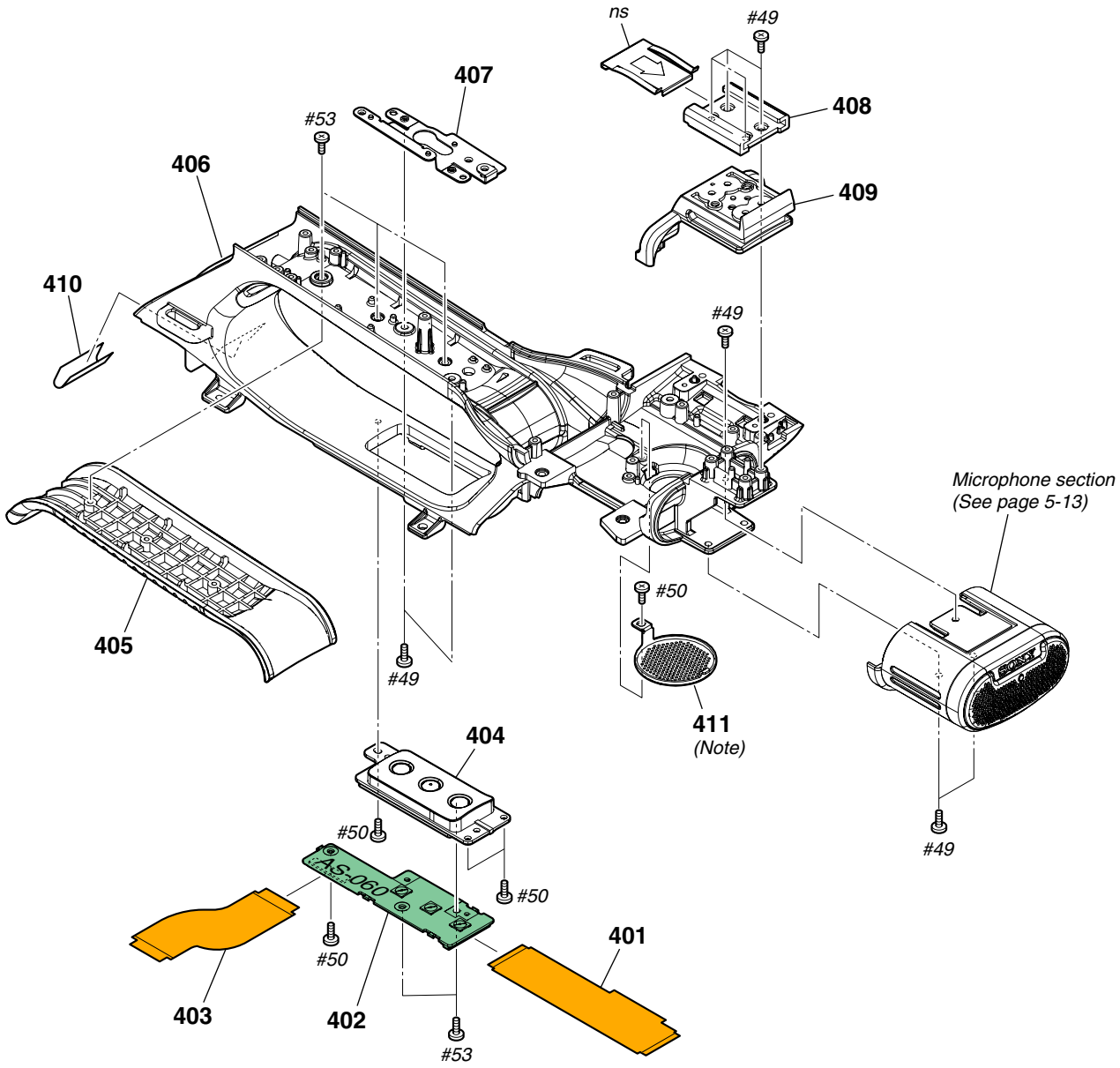
Ref. No.	Part No.	Description
351	A-1599-637-A	FP-967 FLEXIBLE BOARD, COMPLETE
352	4-119-283-01	BRACKET, REAR TALLY
353	A-1599-627-A	GP-025 BOARD, COMPLETE
354	X-2188-599-1	KNOB ASSY, ZOOM SELECTION
* 355	4-119-284-01	RETAINER, SPEAKER
* 356	4-119-285-01	CUSHION, SPEAKER
357	2-178-550-01	HOLDER, SPEAKER
358	1-836-006-11	CABLE, FLEXIBLE FLAT (FFC-172)

Ref. No.	Part No.	Description
359	A-1599-624-A	MJ-002 BOARD, COMPLETE
360	4-119-280-01	BRACKET, MICROPHONE JACK
361	3-061-234-01	NUT (M6X0.5)
362	X-2320-853-1	CABINET (24000) ASSY, (FRONT)
SP901	1-825-968-11	LOUDSPEAKER (1.8CM)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)

5-1-9. HANDLE SECTION-4

ns: not supplied

DISASSEMBLY HARDWARE LIST



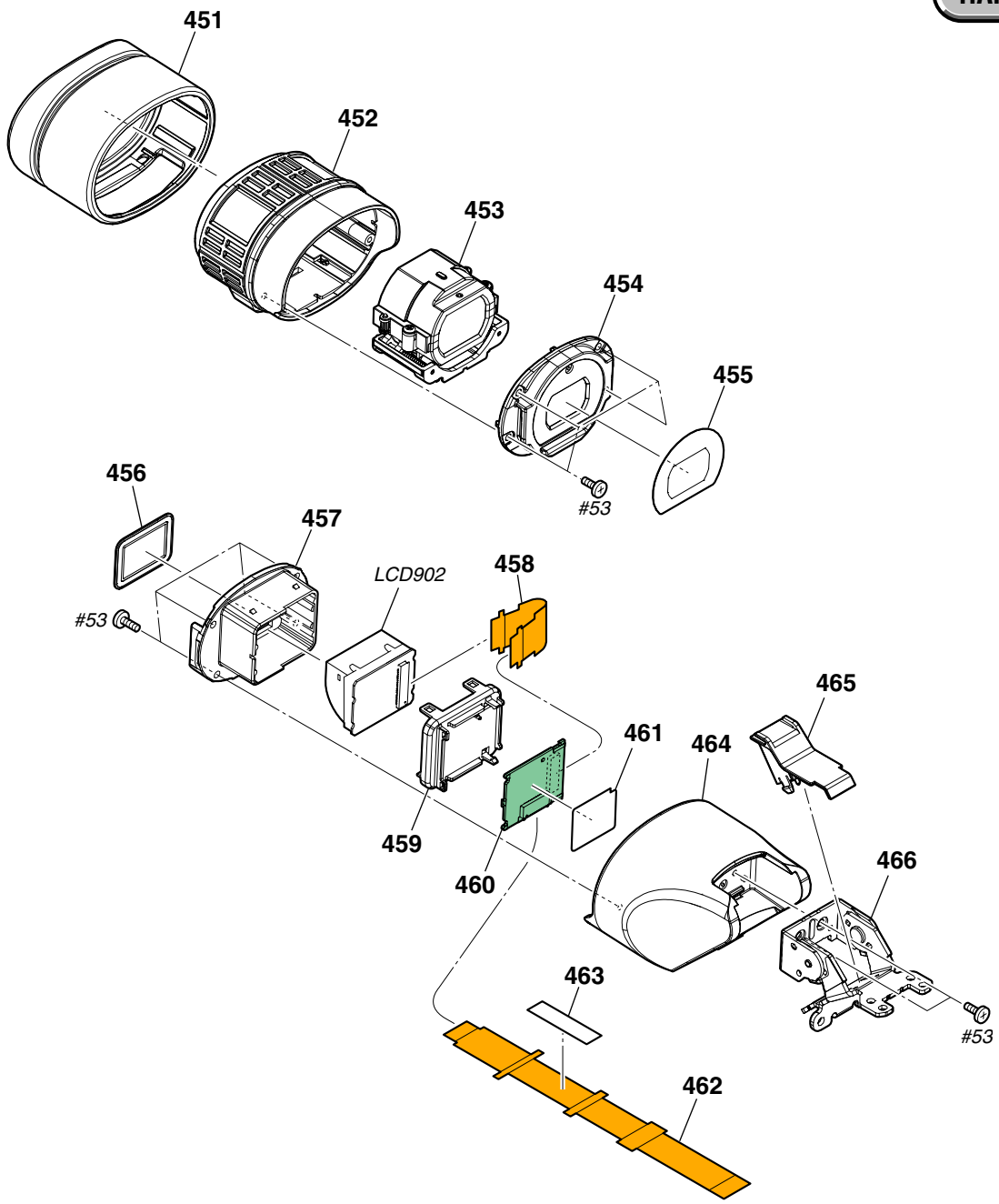
Note: スピーカグリル取付時は「HELP11」を必ずお読みください。

Note: Be sure to read "HELP11" when you install the speaker grille.

Ref. No.	Part No.	Description
401	1-876-953-11	FP-982 FLEXIBLE BOARD
402	A-1599-643-A	AS-060 BOARD, COMPLETE
403	1-876-952-11	FP-981 FLEXIBLE BOARD
404	X-2320-858-1	CABINET (24000) ASSY, ASSIGN
405	4-119-277-01	GRIP
406	4-119-276-01	HANDLE
407	4-119-282-01	BRACKET, GP
408	3-069-286-03	SHOE, ACCESSORY
409	4-119-278-01	CABINET, FRONT SHOE
410	2-590-635-01	TAPE (AS 1/2)
* 411	2-178-566-01	GRILLE, SPEAKER (Note)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)

5-1-10. EVF SECTION

HARDWARE LIST



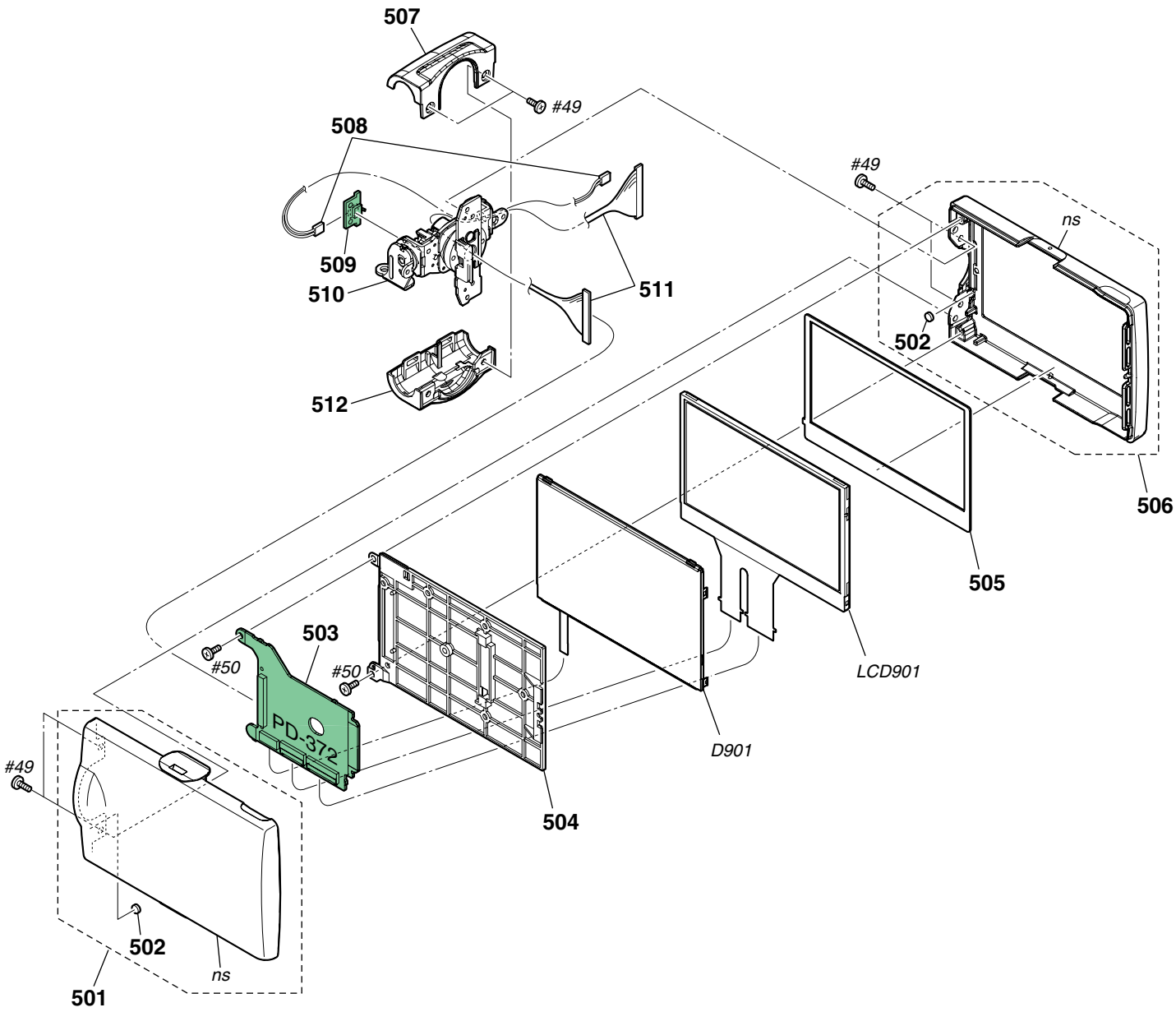
Ref. No.	Part No.	Description
451	4-119-301-01	EYE CUP (SMALL)
452	X-2320-860-1	EYE CUP (24000) ASSY
453	X-2320-861-1	LENS ASSY, VF
454	4-119-302-01	LID, EYE CUP CABINET
455	4-119-303-01	COVER, EYE CUP CABINET LID
456	3-288-591-01	SHEET, VF PROTECTION
457	3-288-585-01	CASE, PANEL
458	1-873-733-11	FP-776 FLEXIBLE BOARD
459	3-288-586-01	LID, PANEL
460	A-1599-826-A	VF-178 BOARD, COMPLETE

Ref. No.	Part No.	Description
* 461	3-299-948-01	SHEET (UU)
462	1-876-945-11	FP-974 FLEXIBLE BOARD
463	3-291-247-02	TAPE (VF)
464	X-2320-862-1	CABINET (24000) ASSY, VF
* 465	3-877-836-01	HOLDE_FPC (VF)
466	X-2320-859-1	HINGE ASSY, VF
LCD902	1-802-560-31	LCD MODULE
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)

5-1-11. LCD SECTION

ns: not supplied

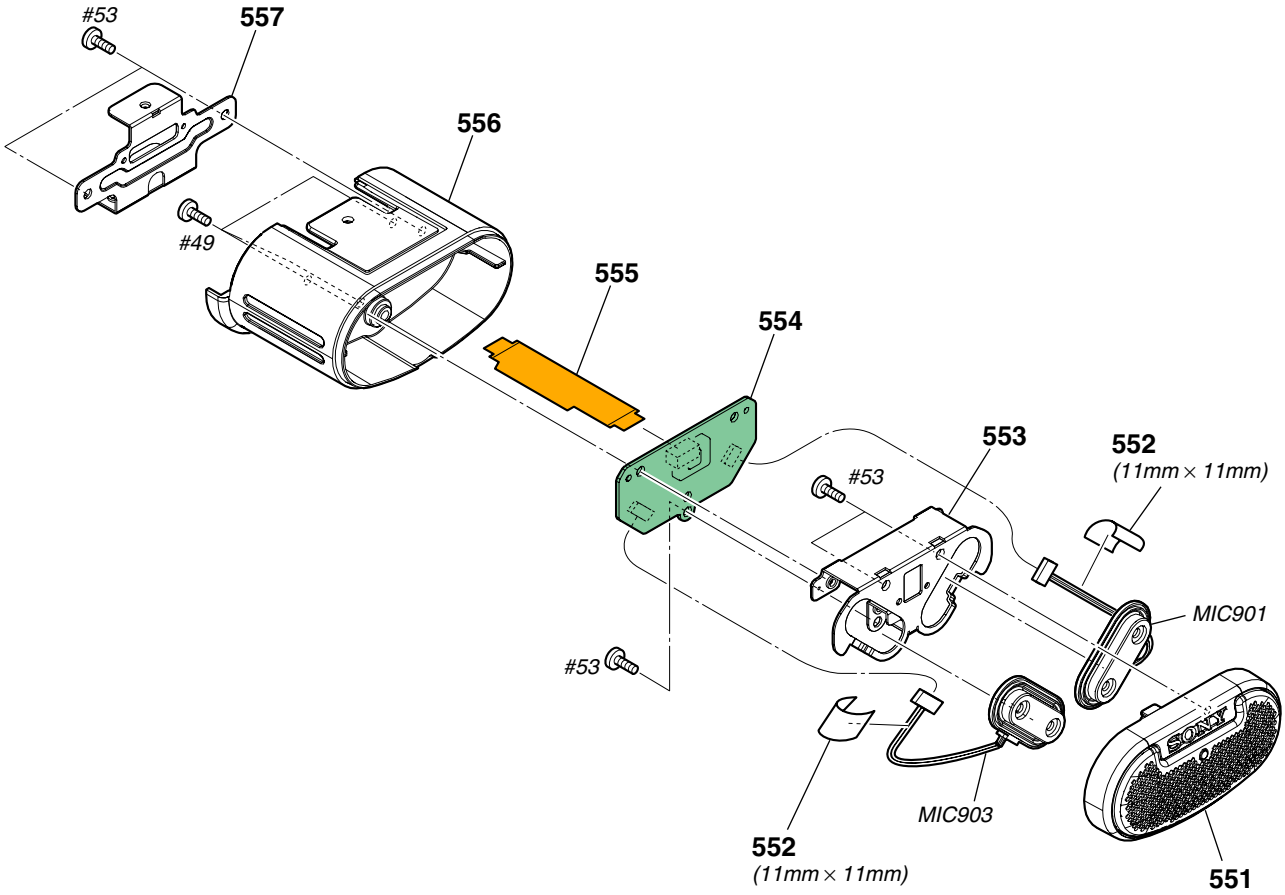
DISASSEMBLY HARDWARE LIST



Ref. No.	Part No.	Description
501	X-2320-864-1	CABINET (UPPER (24000)) ASSY
502	1-471-278-11	MAGNET
503	A-1599-827-A	PD-372 BOARD, COMPLETE
504	X-2188-611-1	FRAME ASSY, BL
505	3-288-565-11	CUSHION, PANEL
506	X-2320-865-1	CABINET (LOWER (24000)) ASSY
507	3-288-566-11	CABINET (T), PANEL HINGE
508	1-963-030-21	HARNESS (SW-116)
509	A-1599-828-A	HT-002 BOARD, COMPLETE
510	X-2342-571-1	HINGE (TYPE 07KAI) ASSY, PANEL
511	1-964-790-21	HARNESS (PR-074)
512	3-288-567-11	CABINET (B), PANEL HINGE
D901	1-480-358-11	BLOCK, LIGHT GUIDE PLATE (3.2)
LCD901	1-802-590-11	INDICATOR MODULE, LIQUIDCRYSTAL
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)

5-1-12. MICROPHONE SECTION

HARDWARE LIST



注意： 552 番は，ヒメロン T0.25 (3-076-631-01)を切って使用してください。

CAUTION: For the part of 552, cut NON WOVEN (T0.25) (3-076-631-01) into the desired length and use it.

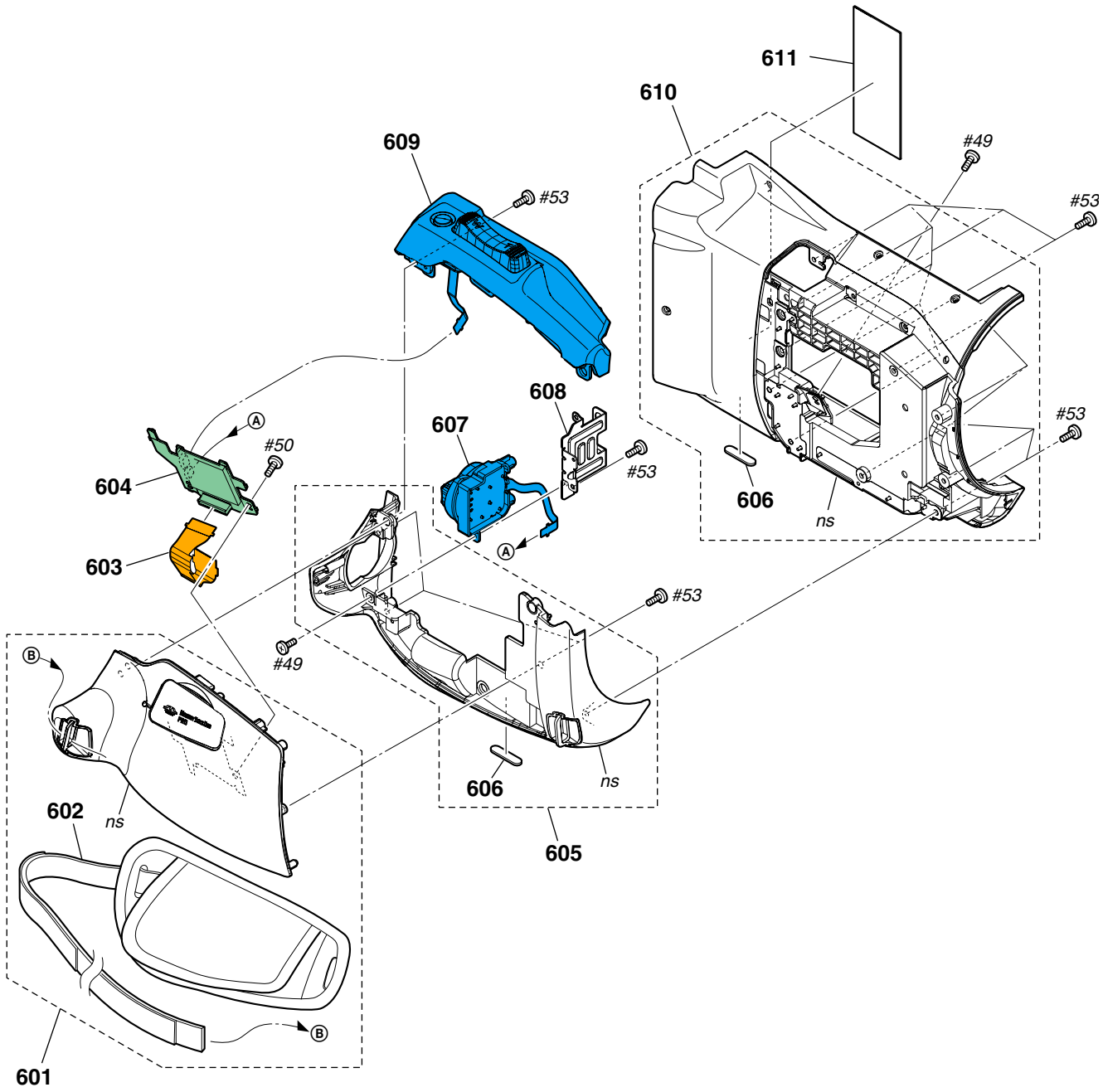
Ref. No.	Part No.	Description
551	X-2320-863-1	GRILLE (24000) ASSY, MICROPHONE
552	CAUTION	TAPE (11x11)
* 553	4-119-326-01	BRACKET (F), MICROPHONE
554	A-1599-610-A	MA-454 BOARD, COMPLETE
555	1-876-946-11	FP-975 FLEXIBLE BOARD
556	4-119-325-01	COVER (M), MICROPHONE

Ref. No.	Part No.	Description
* 557	4-119-330-01	BRACKET (M), MICROPHONE
MIC901	1-542-513-21	MICROPHONE (R ch)
MIC903	1-542-513-21	MICROPHONE (L ch)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)

5-1-13. CABINET (L) SECTION

ns: not supplied

DISASSEMBLY HARDWARE LIST

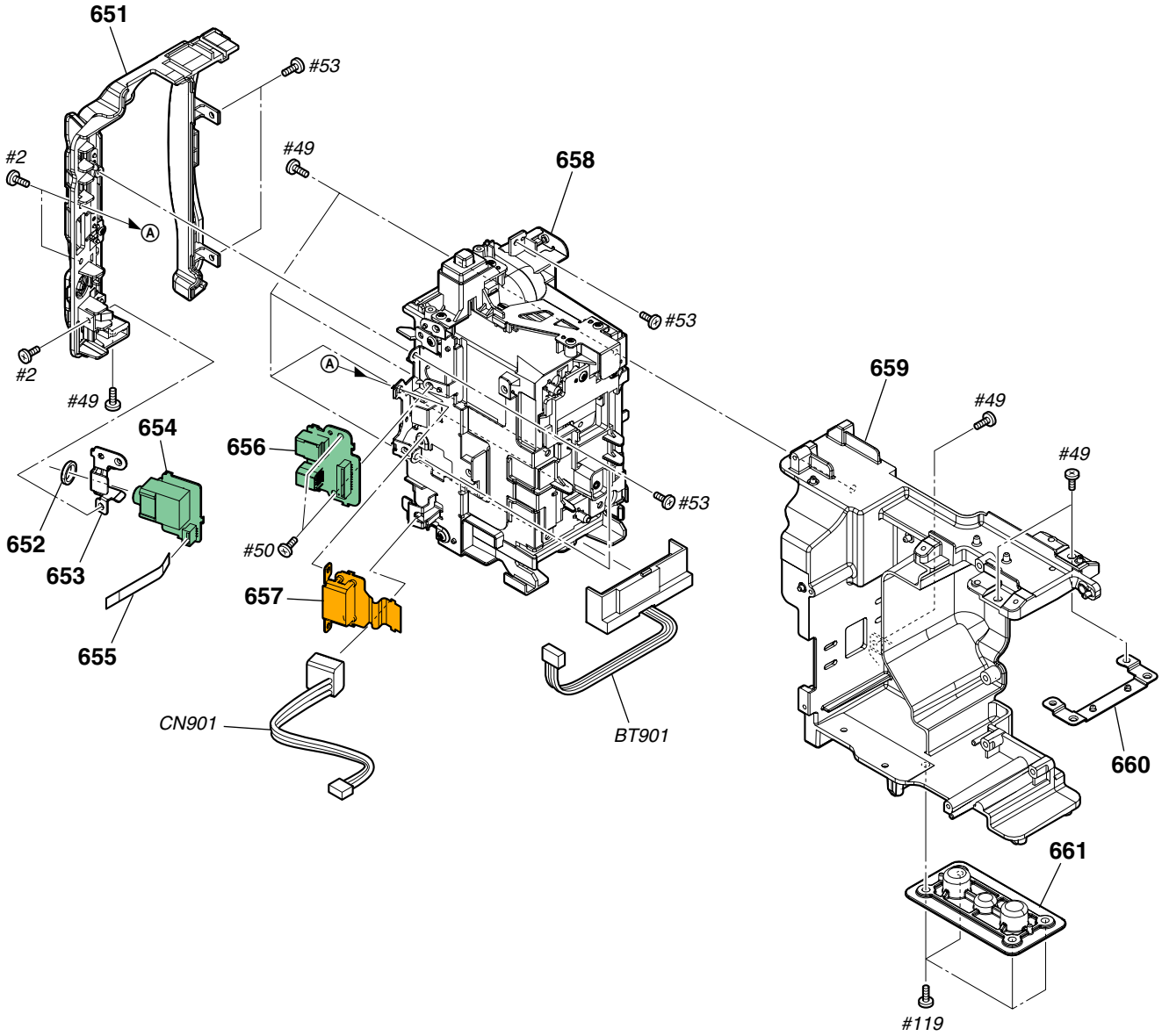


Ref. No.	Part No.	Description
601	X-2320-874-1	CABINET (G (24000)) ASSY
602	2-178-804-01	BELT, GRIP
603	1-876-942-11	FP-971 FLEXIBLE BOARD
604	A-1599-839-A	MS-405 BOARD, COMPLETE
605	X-2320-875-1	CABINET (U (24000)) ASSY
606	2-178-805-01	FOOT, RUBBER
607	1-480-869-11	SWITCH BLOCK, CONTROL (PS24000)

Ref. No.	Part No.	Description
* 608	4-119-422-01	FRAME, PS
609	1-480-868-11	SWITCH BLOCK, CONTROL (PZ24000)
610	X-2320-873-1	CABINET (L (24000)) ASSY
* 611	4-119-448-01	LABEL, FUSE REPLACEMENT CAUTION
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)

5-1-14. BT PANEL SECTION

HARDWARE LIST



• Refer to page 5-1 for mark ⚠.

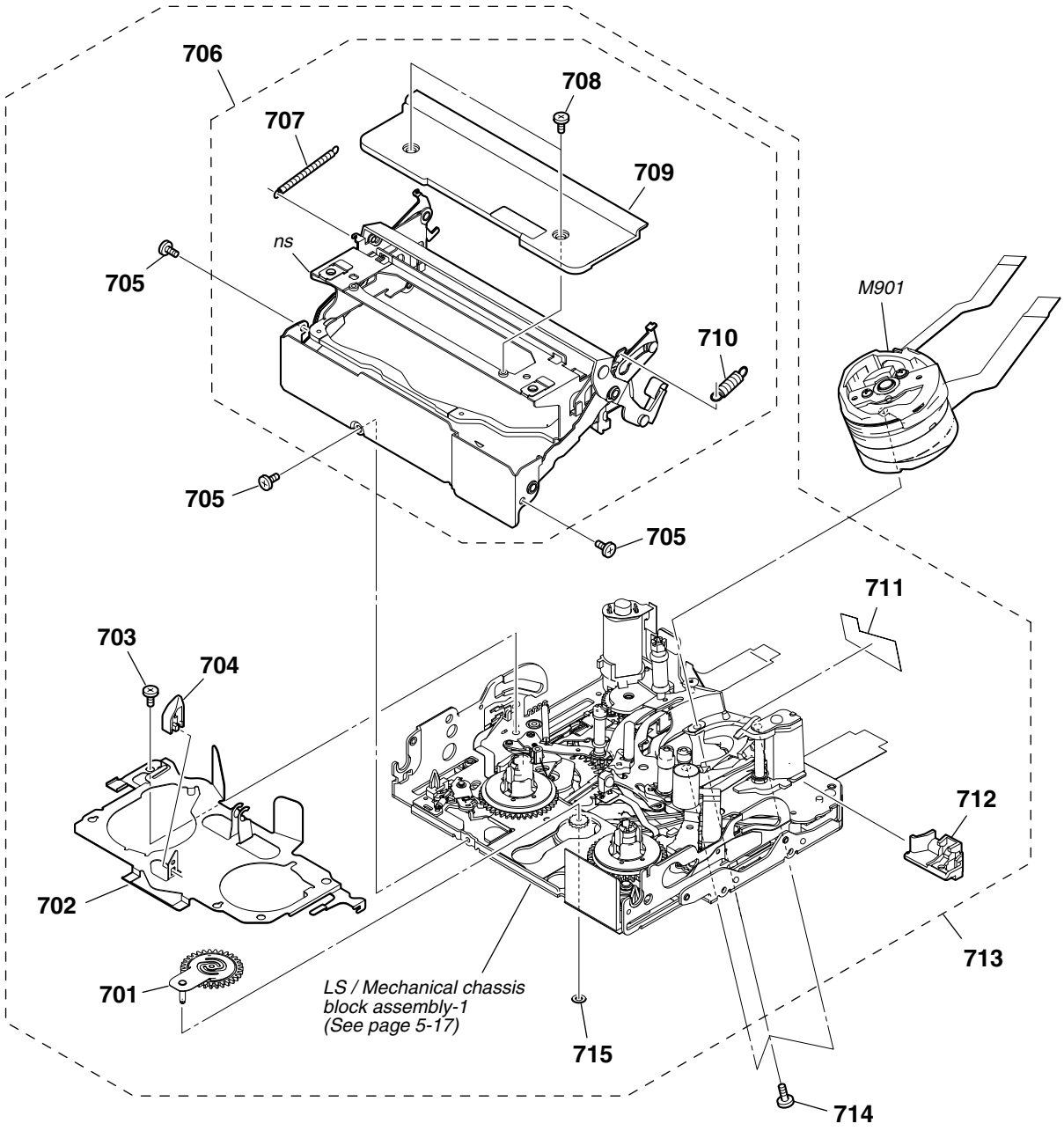
Ref. No.	Part No.	Description
651	X-2320-851-1	PANEL (24000) ASSY, BT
652	3-061-234-01	NUT (M6X0.5)
653	4-119-251-01	HOLDER, JACK
654	A-1599-843-A	HP-153 BOARD, COMPLETE
655	1-836-003-11	CABLE, FLEXIBLE FLAT (FFC-169)
656	A-1599-841-A	JK-376 BOARD, COMPLETE
657	A-1599-844-A	FP-965 FLEXIBLE BOARD, COMPLETE
658	X-2320-852-1	HOLDER (24000) ASSY, BT
659	4-119-232-01	CHASSIS, MAIN
660	4-119-237-01	PLATE (F), MC FIXED

Ref. No.	Part No.	Description
661	4-119-234-01	WASHER, TRIPOD
⚠BT901	1-694-411-31	TERMINAL BOARD, BATTERY
⚠CN901	1-785-247-31	CONNECTOR, DC-IN
#2	2-635-562-31	SCREW (M1.7) (Black)
#49	2-630-005-31	SCREW (M2), NEW TRUSTER, P2 (Black)
#50	2-891-494-11	SCREW (M2), NEW TRUSTER, P2 (Red)
#53	3-080-206-21	SCREW, TAPPING, P2 (Black)
#119	7-627-556-58	SCREW +P 2.6X5 (Black)

5-1-15. MECHANISM DECK SECTION

ns: not supplied

HARDWARE LIST

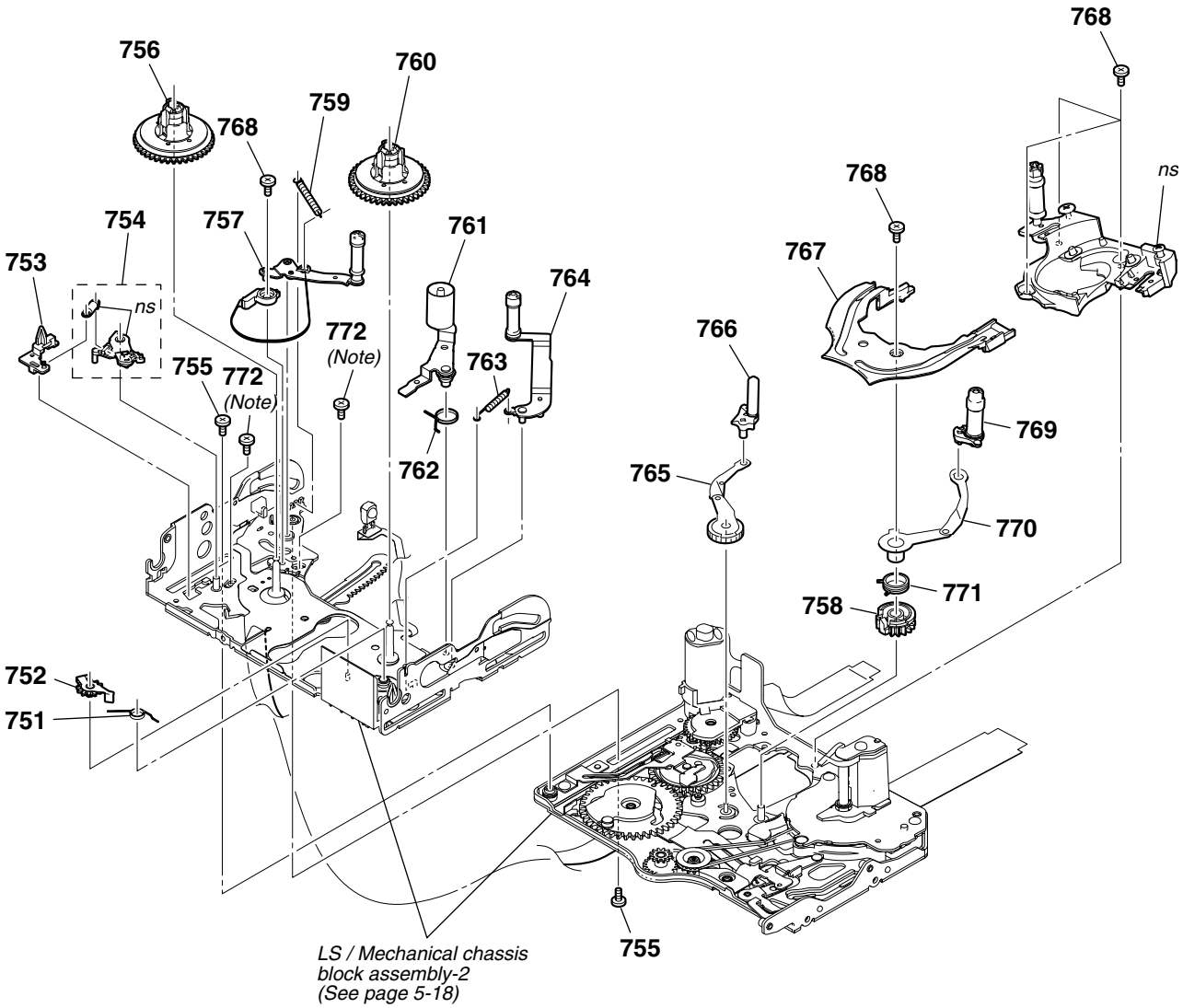


Ref. No.	Part No.	Description
701	X-2024-478-1	PENDULUM ASSY
702	2-342-917-02	BASE, LED
703	7-627-850-77	SCREW, PRECISION +P 1.4X1.8
704	3-079-366-11	RELEASE, REEL LOCK
705	3-703-816-08	SCREW (M1.4X1.4), SPECIAL HEAD
706	X-2103-406-3	CASSETTE COMPARTMENT ASSY
707	2-342-926-01	SPRING (ARM S), TENSION COIL
708	2-666-376-11	SCREW (1.4X1.0), POWER LOCK
709	2-342-933-02	PLATE, TOP
710	2-342-927-01	SPRING (ARM T), TENSION COIL
711	2-541-585-01	HEET, FLEXIBLE ADHESIVE
712	2-342-918-01	TG6 CATCHER
713	A-1437-006-A	MD (N220) SUB ASSY (S) A
714	3-703-816-13	SCREW (M1.4X2.0), SPECIAL HEAD
715	3-315-414-31	WASHER
M901	A-1154-545-A	DRUM (DEH-33E-R)

5-1-16. LS/MECHANICAL CHASSIS BLOCK ASSEMBLY-1

ns: not supplied

HARDWARE LIST



Note: *These two screws are the fixing screws of the LS cam plate.*
These two fixing screws are used for adjusting the LS cam plate position.
(refar to 4-2. LS cam adjustment of DV mechanical adjustment manual IX)

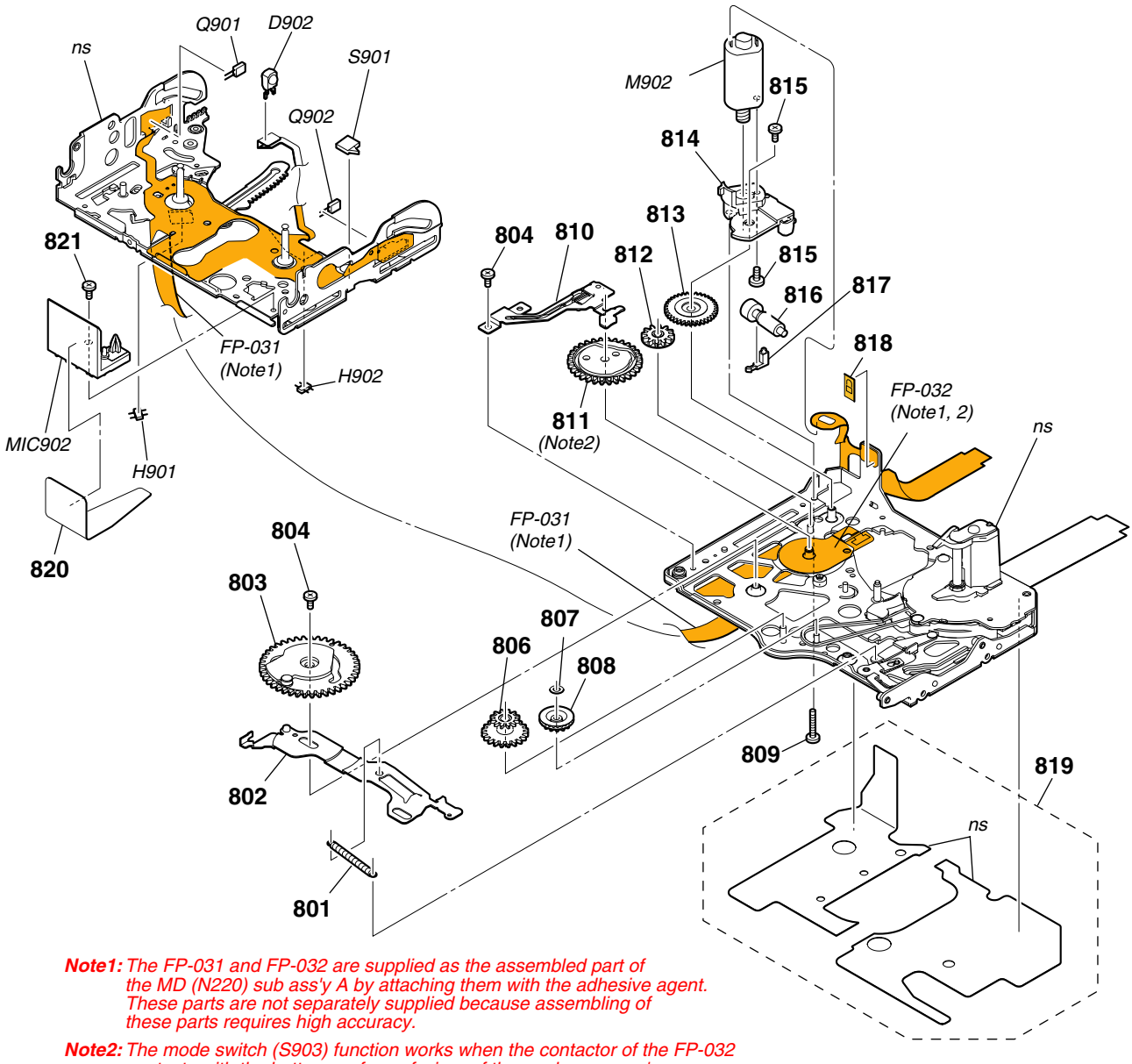
Ref. No.	Part No.	Description
751	2-342-759-01	SPRING, RVS BRAKE
752	A-1083-005-A	BRAKE BLOCK ASSY, RVS
753	2-342-731-01	POSITIONING, S
754	A-1083-006-A	BRAKE BLOCK ASSY, S
755	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
756	X-2067-290-1	TABLE ASSY, S REEL
757	A-1132-279-A	REGULATOR BLOCK ASSY, TENSION
758	2-342-705-01	GEAR (T), GL
759	2-342-902-01	SPRING, TENSION REGULATOR
760	X-2067-291-1	TABLE ASSY, T REEL
761	X-2067-295-1	ARM ASSY, PINCH

Ref. No.	Part No.	Description
762	2-342-906-01	SPRING (PINCH RETURN), TORSION
763	2-342-626-01	SPRING (RETURN TG6), EXTENSION
764	A-1083-002-A	TG6 BLOCK ASSY
765	X-2024-468-1	ARM (S) ASSY, GL
766	X-2024-465-1	COASTER (S) ASSY
767	2-342-612-01	RAIL
768	3-703-816-13	SCREW (M1.4X2.0), SPECIAL HEAD
769	X-2024-466-1	COASTER (T) ASSY
770	X-2024-469-1	ARM (T) ASSY, GL
771	2-342-716-01	SPRING (T), TORSION COIL
772	3-703-816-08	SCREW (M1.4X1.4), SPECIAL HEAD (for adjustment) (Note)

5-1-17. LS/MECHANICAL CHASSIS BLOCK ASSEMBLY-2

ns: not supplied

HARDWARE LIST



Note1: *The FP-031 and FP-032 are supplied as the assembled part of the MD (N220) sub ass'y A by attaching them with the adhesive agent. These parts are not separately supplied because assembling of these parts requires high accuracy.*

Note2: *The mode switch (S903) function works when the contactor of the FP-032 contacts with the bottom surface of wiper of the mode gear ass'y.*

Ref. No.	Part No.	Description
801	2-342-624-02	SPRING (PINCH LIMITTER), EXTEN
802	X-2024-463-2	SLIDER ASSY, MODE
803	X-2024-462-1	GEAR ASSY, CAM
804	3-075-097-11	SCREW (M1.4X1.4), SPECIAL HEAD
806	2-342-621-01	GEAR, RELAY
807	3-315-414-31	WASHER
808	2-342-620-01	GEAR, CONVERSION
809	3-084-377-01	HEAD (SCREW M1.2)
810	X-2024-460-1	BASE ASSY, CAM
811	X-2024-461-1	GEAR ASSY, MODE (Note 2)
812	2-342-615-01	GEAR, NO.2
813	2-342-691-01	GEAR, NO.1
814	2-637-945-01	HOLDER, MOTOR
815	3-895-822-71	SCREW (M1.2X2), SPECIAL, 0
816	2-342-689-01	SHAFT (2J), WORM

Ref. No.	Part No.	Description
817	2-637-947-01	BASE, MOTOR HOLDER
818	1-677-049-11	FP-228 FLEXIBLE BOARD (DEW SENSOR)
819	2-342-686-01	COVER, CAPSTAN
820	2-541-984-01	COVER, MIC
821	3-703-816-13	SCREW (M1.4X2.0), SPECIAL HEAD
D902	6-500-652-01	DIODE GL453SE0000F (TAPE LED)
H901	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (S REEL)
H902	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (T REEL)
M902	X-2024-464-1	MOTOR ASSY (LOADING)
MIC902	1-818-576-11	PIN, CONNECTOR (WITH DETECTION)
Q901	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE END)
Q902	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE TOP)
S901	1-786-448-22	SWITCH, PUSH (1 KEY) (CC DOWN)

5-2. ELECTRICAL PARTS LIST

Electrical parts list of the CM-097, CM-104 are not shown.
Pages 5-20 is not shown.

Ref. No.	Part No.	Description			
	A-1599-643-A	AS-060 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN8801	1-817-920-11	CONNECTOR, FPC (ZIF) 80P			
CN8802	1-817-920-11	CONNECTOR, FPC (ZIF) 80P			
		< RESISTOR >			
R8804	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R8805	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
		< SWITCH >			
S8801	1-786-157-31	TACTILE SWITCH (4 (ASSIGN))			
S8802	1-786-157-31	TACTILE SWITCH (5 (ASSIGN))			
S8803	1-786-157-31	TACTILE SWITCH (6 (ASSIGN))			
		< VARISTOR >			
* VDR881	1-802-279-11	VARISTOR (SMD)			
	A-1599-835-A	CK-204 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
* CN8001	1-816-650-51	FFC/FPC CONNECTOR (LIF) 24P			
CN8002	1-816-655-61	CONNECTOR, FFC/FPC 8P			
* CN8003	1-779-333-51	CONNECTOR, FFC/FPC 18P			
* CN8004	1-779-331-51	CONNECTOR, FFC/FPC 14P			
* CN8005	1-779-327-51	CONNECTOR, FFC/FPC 6P			
		< RESISTOR >			
R8001	1-218-970-11	METAL CHIP	27K	5%	1/16W
R8002	1-218-970-11	METAL CHIP	27K	5%	1/16W
R8003	1-218-970-11	METAL CHIP	27K	5%	1/16W
R8004	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R8005	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R8006	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R8007	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R8008	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R8009	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R8011	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R8012	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R8013	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R8014	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R8015	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R8016	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R8018	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R8019	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R8020	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R8022	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R8029	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R8030	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R8031	1-218-970-11	METAL CHIP	27K	5%	1/16W

Ref. No.	Part No.	Description
	(Not supplied)	FP-031 FLEXIBLE BOARD
		**********
(This flexible board is included in MD (N220) sub assy (S) A (A-1437-006-A).)		
		< DIODE >
D902	6-500-652-01	DIODE GL453SE0000F (TAPE LED)
		< HOLE ELEMENT >
H901	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (S REEL SENSOR)
H902	8-719-067-74	ELEMENT, HOLE HW-105A-CDE-T (T REEL SENSOR)
		< CONNECTOR >
MIC902	1-818-576-11	PIN, CONNECTOR (WITH DETECTION) (4 PIN CONNECTOR)
		< TRANSISTOR >
Q901	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE END SENSOR)
Q902	6-550-672-01	TRANSISTOR PT4850FJE00F (TAPE TOP SENSOR)
		< SWITCH >
S901	1-786-448-22	SWITCH, PUSH (1 KEY) (CC DOWN)
	(Not supplied)	FP-032 FLEXIBLE BOARD
		**********
(This flexible board with S903 is included in MD (N220) sub assy (S) A (A-1437-006-A).)		
	1-677-049-11	FP-228 FLEXIBLE BOARD (DEW SENSOR)
		**********
(This flexible board is included in MD (N220) sub assy (S) A (A-1437-006-A).)		
	1-873-733-11	FP-776 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-776 flexible board.)		
	A-1599-844-A	FP-965 FLEXIBLE BOARD, COMPLETE
		**********
		< CONNECTOR >
* CN001	1-819-696-21	CONNECTOR, HDMI (HDMI OUT)
	A-1599-641-A	FP-966 FLEXIBLE BOARD, COMPLETE
		**********
		< CAPACITOR >
C401	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
C402	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
C403	1-125-777-11	CERAMIC CHIP 0.1uF 10% 10V
		< IC >
IC401	6-600-163-01	IC RS-770
IC402	6-600-513-11	IC TK60019CS8G0L
IC403	6-600-513-11	IC TK60019CS8G0L
		< RESISTOR >
R401	1-216-805-11	METAL CHIP 47 5% 1/10W
	A-1599-637-A	FP-967 FLEXIBLE BOARD, COMPLETE
		**********
		< CAPACITOR >
C201	1-127-760-11	CERAMIC CHIP 4.7uF 10% 6.3V
		< DIODE >
D201	8-719-064-07	DIODE SML-310LTT86 (REC LAMP (BACK))
		< IC >
IC201	6-600-163-01	IC RS-770
		< RESISTOR >
R201	1-216-815-11	METAL CHIP 330 5% 1/10W
R202	1-216-805-11	METAL CHIP 47 5% 1/10W
		< TEST PIN >
TP201	1-535-757-11	CHIP, CHECKER
	A-1599-833-A	FP-969 FLEXIBLE BOARD, COMPLETE
		**********
		< SWITCH >
* S101	1-798-076-21	PUSHBUTTON SWITCH (EJECT)
	1-876-942-11	FP-971 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-971 flexible board.)		
	1-876-944-11	FP-973 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-973 flexible board.)		
	1-876-945-11	FP-974 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-974 flexible board.)		
	1-876-946-11	FP-975 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-975 flexible board.)		
	1-876-952-11	FP-981 FLEXIBLE BOARD
		**********
(There isn't mounted electrical parts in FP-981 flexible board.)		

Ref. No.	Part No.	Description			
	1-876-953-11	FP-982 FLEXIBLE BOARD			
		**********			
(There isn't mounted electrical parts in FP-982 flexible board.)					
	1-876-954-11	FP-983 FLEXIBLE BOARD			
		**********			
(There isn't mounted electrical parts in FP-983 flexible board.)					
	A-1599-627-A	GP-025 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C7811	1-100-539-91	TANTAL. CHIP	47uF	20%	6.3V
		< CONNECTOR >			
* CN7801	1-817-564-71	CONNECTOR, FPC (ZIF) 33P			
CN7802	1-816-654-61	FFC/FPC CONNECTOR (LIF) 6P			
* CN7803	1-817-543-71	CONNECTOR, FPC (ZIF) 27P			
		< RESISTOR >			
R7801	1-218-970-11	METAL CHIP	27K	5%	1/16W
R7802	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R7803	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R7804	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R7805	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R7806	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R7812	1-216-864-11	SHORT CHIP	0		
		< SWITCH >			
S7801	1-771-487-11	SWITCH, SLIDE (HANDLE ZOOM)			
	A-1602-003-A	GY-014 BOARD, COMPLETE (SERVICE)			
		**********			
		< CAPACITOR >			
C8501	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
C8502	1-112-746-11	CAP, CERAMIC	4.7uF	10%	6.3 V
C8503	1-112-746-11	CAP, CERAMIC	4.7uF	10%	6.3 V
C8504	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8505	1-114-411-21	CAP, CERAMIC	0.33uF	10%	6.3V
C8506	1-114-411-21	CAP, CERAMIC	0.33uF	10%	6.3V
C8507	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
C8508	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
C8509	1-119-923-11	CAP, CERAMIC	0.047uF	10%	10V
C8510	1-119-923-11	CAP, CERAMIC	0.047uF	10%	10V
C8511	1-119-923-11	CAP, CERAMIC	0.047uF	10%	10V
C8512	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8513	1-119-923-11	CAP, CERAMIC	0.047uF	10%	10V
C8514	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8515	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8516	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8517	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8518	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8519	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8520	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
C8521	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
C8522	1-165-989-11	CAP, CERAMIC	10uF	10%	6.3V
		< CONNECTOR >			
CN8501	1-816-655-61	CONNECTOR, FFC/FPC 8P			
		< IC >			
* IC8501	8-753-284-38	IC CXA3739AER-T2			
		< RESISTOR >			
R8509	1-218-989-11	RES, CHIP	1M	5%	1/16W
R8510	1-218-989-11	RES, CHIP	1M	5%	1/16W
R8511	1-208-911-11	RES, CHIP	10K	0.50%	1/16W
R8512	1-208-911-11	RES, CHIP	10K	0.50%	1/16W
R8513	1-208-711-11	RES, CHIP	15K	0.50%	1/16W
R8514	1-208-711-11	RES, CHIP	15K	0.50%	1/16W
R8515	1-218-969-11	RES, CHIP	22K	5%	1/16W
R8516	1-218-969-11	RES, CHIP	22K	5%	1/16W
R8517	1-218-969-11	RES, CHIP	22K	5%	1/16W
R8518	1-218-969-11	RES, CHIP	22K	5%	1/16W
R8529	1-218-990-81	SHORT CHIP	0		
R8530	1-218-990-81	SHORT CHIP	0		
		< SENSOR >			
* SE8501	1-480-218-11	SENSOR, ANGULAR VELOCITY (31.2kHz) (PITCH SENSOR)			
* SE8502	1-479-022-61	SENSOR, ANGULAR VELOCITY (32.2kHz) (YAW SENSOR)			
	A-1599-843-A	HP-153 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C9202	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C9203	1-164-935-11	CERAMIC CHIP	470PF	10%	50V
C9204	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
C9205	1-164-939-11	CERAMIC CHIP	0.0022uF	10%	50V
		< CONNECTOR >			
CN9201	1-779-328-51	CONNECTOR, FFC/FPC 8P			
		< DIODE >			
D9201	6-501-257-01	DIODE CL-197TLY-CD-T (CHG)			
		< FERRITE BEAD >			
FB9202	1-400-927-31	BEAD, FERRITE (1005)			
FB9203	1-400-927-31	BEAD, FERRITE (1005)			
		< JACK >			
J9201	1-794-525-12	JACK, MIC (HEADPHONE)			
		< COIL >			
L9201	1-400-922-11	INDUCTOR	220uH		
L9202	1-400-922-11	INDUCTOR	220uH		

Ref. No.	Part No.	Description			
	A-1599-828-A	HT-002 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN7401	1-794-375-21	PIN, CONNECTOR 2P			
		< SWITCH >			
S7401	1-786-180-11	SWITCH, PUSH (1KEY) (PANEL REVERSE)			
	A-1599-841-A	JK-376 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
* CN9507	1-779-335-51	CONNECTOR, FFC/FPC 22P			
CN9508	1-815-794-13	CONNECTOR (MULTIPLE) (A/V R)			
* CN9509	1-794-276-21	CONNECTOR, SQUARE TYPE 4P (HDV/DV)			
		< FERRITE BEAD >			
FB9501	1-400-927-31	BEAD, FERRITE (1005)			
FB9502	1-400-927-31	BEAD, FERRITE (1005)			
		< COMPOSITION CIRCUIT BLOCK >			
RB9501	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
		< THERMISTOR >			
TH9501	1-805-726-11	THERMISTOR, POSITIVE			
TH9502	1-805-726-11	THERMISTOR, POSITIVE			
TH9503	1-805-726-11	THERMISTOR, POSITIVE			
TH9504	1-805-726-11	THERMISTOR, POSITIVE			
		< VARISTOR >			
* VD9501	1-802-279-11	VARISTOR (SMD)			
* VD9502	1-802-279-11	VARISTOR (SMD)			
* VD9504	1-802-279-11	VARISTOR (SMD)			
	A-1599-625-A	KY-105 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN7201	1-816-645-61	FFC/FPC CONNECTOR (LIF) 14P			
		< RESISTOR >			
R7201	1-218-990-81	SHORT CHIP	0		
R7202	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R7204	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R7205	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R7206	1-218-954-11	METAL CHIP	1.2K	5%	1/16W
R7207	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R7208	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R7209	1-218-955-11	METAL CHIP	1.5K	5%	1/16W
R7210	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R7211	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R7212	1-218-957-11	METAL CHIP	2.2K	5%	1/16W
R7213	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R7214	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R7215	1-218-960-11	METAL CHIP	3.9K	5%	1/16W
R7216	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
R7217	1-218-970-11	METAL CHIP	27K	5%	1/16W
R7218	1-218-970-11	METAL CHIP	27K	5%	1/16W
R7219	1-218-964-11	METAL CHIP	8.2K	5%	1/16W
		< SWITCH >			
S7201	1-786-157-31	TACTILE SWITCH (STOP)			
S7202	1-786-157-31	TACTILE SWITCH (PLAY)			
S7203	1-786-157-31	TACTILE SWITCH (+ (VOLUME/MEMORY))			
S7204	1-786-157-31	TACTILE SWITCH (REW)			
S7205	1-786-157-31	TACTILE SWITCH (INDEX)			
S7206	1-786-157-31	TACTILE SWITCH (DISPLAY/BATT INFO)			
S7207	1-786-157-31	TACTILE SWITCH (RESET)			
S7208	1-786-157-31	TACTILE SWITCH (- (VOLUME/MEMORY))			
S7209	1-786-157-31	TACTILE SWITCH (REC 1)			
S7210	1-786-157-31	TACTILE SWITCH (DELETE)			
S7211	1-786-157-31	TACTILE SWITCH (REC 2)			
S7212	1-786-157-31	TACTILE SWITCH (DATA CODE)			
S7213	1-786-157-31	TACTILE SWITCH (PAUSE)			
S7214	1-786-157-31	TACTILE SWITCH (PLAY)			
S7215	1-786-157-31	TACTILE SWITCH (ZERO SET MEM)			
S7216	1-786-157-31	TACTILE SWITCH (FF)			
S7217	1-786-157-31	TACTILE SWITCH (SLOW)			
		< VARISTOR >			
* VDR721	1-802-279-11	VARISTOR (SMD)			
* VDR722	1-802-279-11	VARISTOR (SMD)			
* VDR723	1-802-279-11	VARISTOR (SMD)			
* VDR724	1-802-279-11	VARISTOR (SMD)			
* VDR725	1-802-279-11	VARISTOR (SMD)			
	A-1599-610-A	MA-454 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C8301	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C8302	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8303	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C8304	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C8305	1-164-874-11	CERAMIC CHIP	100PF	5%	50V
C8306	1-100-966-91	CERAMIC CHIP	10uF	20%	10V
C8307	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8308	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8309	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8310	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C8311	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C8312	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C8313	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C8314	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C8315	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C8316	1-164-882-11	CERAMIC CHIP	220PF	5%	16V
C8317	1-100-567-81	CERAMIC CHIP	0.01uF	10%	25V
C8320	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C8321	1-100-611-91	CERAMIC CHIP	22uF	20%	6.3V
C8322	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V

Ref. No.	Part No.	Description			
C8323	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8324	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8325	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8326	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C8327	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
		< CONNECTOR >			
CN8301	1-778-507-21	PIN, CONNECTOR (PC BOARD) 4P			
CN8302	1-778-507-21	PIN, CONNECTOR (PC BOARD) 4P			
* CN8303	1-819-873-61	CONNECTOR, FPC (ZIF) 21P			
		< DIODE >			
D8301	8-719-064-07	DIODE SML-310LTT86 (REC LAMP (FRONT))			
		< IC >			
IC8301	6-707-702-01	IC NJM2746RB1 (TE2)			
IC8302	6-707-702-01	IC NJM2746RB1 (TE2)			
IC8303	6-707-702-01	IC NJM2746RB1 (TE2)			
IC8304	6-707-702-01	IC NJM2746RB1 (TE2)			
		< COIL >			
L8301	1-469-555-21	INDUCTOR	10uH		
		< RESISTOR >			
R8301	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W
R8302	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W
R8303	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W
R8304	1-208-691-11	METAL CHIP	2.2K	0.50%	1/16W
R8305	1-219-604-11	METAL CHIP	82K	0.50%	1/16W
R8306	1-208-719-11	METAL CHIP	33K	0.50%	1/16W
R8307	1-219-604-11	METAL CHIP	82K	0.50%	1/16W
R8308	1-208-719-11	METAL CHIP	33K	0.50%	1/16W
R8309	1-219-604-11	METAL CHIP	82K	0.50%	1/16W
R8310	1-208-719-11	METAL CHIP	33K	0.50%	1/16W
R8311	1-219-604-11	METAL CHIP	82K	0.50%	1/16W
R8312	1-208-719-11	METAL CHIP	33K	0.50%	1/16W
R8313	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8314	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8315	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8316	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8317	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8318	1-208-707-11	METAL CHIP	10K	0.50%	1/16W
R8319	1-218-978-11	METAL CHIP	120K	5%	1/16W
R8320	1-208-931-11	METAL CHIP	68K	0.50%	1/16W
R8321	1-208-931-11	METAL CHIP	68K	0.50%	1/16W
R8322	1-218-978-11	METAL CHIP	120K	5%	1/16W
R8323	1-216-811-11	METAL CHIP	150	5%	1/10W

Electrical parts list of the MD-141 is not shown.
Pages 5-25 to 5-26 are not shown.

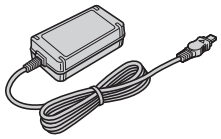
Ref. No.	Part No.	Description			
	A-1599-624-A	MJ-002 BOARD, COMPLETE			
		**********			
		< CONNECTOR >			
CN9001	1-816-654-61	FFC/FPC CONNECTOR (LIF) 6P			
		< FERRITE BEAD >			
FB9001	1-500-238-11	BEAD, FERRITE (CHIP) (1608)			
FB9002	1-500-238-11	BEAD, FERRITE (CHIP) (1608)			
		< JACK >			
J9001	1-794-525-12	JACK, MIC (MIC (PLUG IN POWER))			
	A-1599-839-A	MS-405 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C8601	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
C8603	1-125-777-11	CERAMIC CHIP	0.1uF	10%	10V
		< CONNECTOR >			
CN8602	1-779-336-51	CONNECTOR, FFC/FPC 24P			
CN8603	1-817-913-41	MEMORY STICK DUO CONNECTOR			
* CN8605	1-779-327-51	CONNECTOR, FFC/FPC 6P			
* CN8606	1-779-329-51	CONNECTOR, FFC/FPC 10P			
		< DIODE >			
D8601	6-501-216-01	DIODE CL-271HR-C-TS (MS ACCESS)			
D8604	8-719-083-91	DIODE EDZ TE61 6.8B			
D8605	8-719-074-67	DIODE EDZ-TE61-5.6B			
		< FERRITE BEAD >			
FB8601	1-500-238-11	BEAD, FERRITE (CHIP) (1608)			
		< IC >			
* IC8601	6-708-445-01	IC R1114Q291D-TR-FA			
		< RESISTOR >			
R8601	1-218-943-11	METAL CHIP	150	5%	1/16W
R8602	1-218-953-11	METAL CHIP	1K	5%	1/16W
R8614	1-216-864-11	SHORT CHIP	0		
		< VARISTOR >			
* VDR007	1-802-279-11	VARISTOR (SMD)			
* VDR009	1-802-279-11	VARISTOR (SMD)			
* VDR010	1-802-279-11	VARISTOR (SMD)			

Electrical parts list of the PD-372, PI-029, VC-543 and VF-178 are not shown.
Pages 5-28 to 5-41 are not shown.

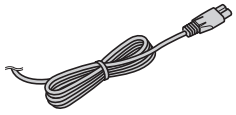
• EXCEPT J MODEL

Checking supplied accessories. **to J MODEL**

Note : This item is supplied with the unit as an accessory, but is not prepared as a service part.

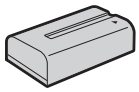


AC Adaptor
(AC-L100)
⚠ 1-479-286-32



Power cord (mains lead)
⚠ 1-555-074-91 (AUS)
⚠ 1-790-107-61 (US, CND)
⚠ 1-792-549-41 (JE)
⚠ 1-827-269-12 (UK, HK)
⚠ 1-832-121-31 (CH)
⚠ 1-833-892-21 (KR)
⚠ 1-834-482-31 (AEP, E:PAL)
⚠ 1-834-852-11 (E:NTSC)

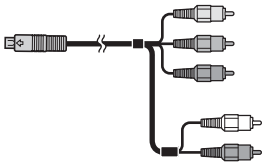
Conversion (2P) Adaptor
⚠ 1-569-007-12
(E:NTSC, JE)



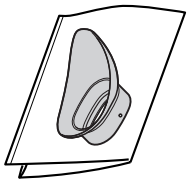
Rechargeable battery pack
(NP-F570)
(Note)

Wireless Remote Commander
(RMT-831)
1-478-495-41

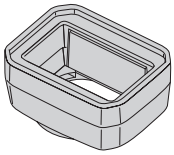
A/V connecting cable
1-823-156-61



Component A/V cable
1-834-646-11



Large eyecup
X-2342-702-1



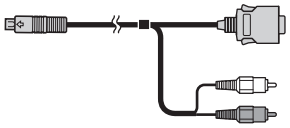
Lens hood with lens cover
X-2320-850-1

Operating Guide
(HDR-FX1000)
4-111-862-11 (ENGLISH, SPANISH) (US, CND, JE, E:NTSC)
4-111-862-21 (FRENCH) (CND)
4-111-862-31 (SPANISH, PORTUGUESE) (JE, E:NTSC)
4-111-862-41 (TRADITIONAL CHINESE) (E:NTSC)
4-111-862-52 (KOREAN) (KR, JE)

Operating Guide
(HDR-FX1000E)
4-111-863-11 (ENGLISH) (AEP, UK, HK, AUS, JE, E:PAL)
4-111-863-21 (RUSSIAN) (AEP, JE)
4-111-863-31 (FRENCH, ITALIAN) (AEP)
4-111-863-41 (GERMAN, DUTCH) (AEP)
4-111-863-51 (SPANISH, PORTUGUESE) (AEP)
4-111-863-61 (TRADITIONAL CHINESE) (HK)
4-111-863-71 (SIMPLIFIED CHINESE) (CH, JE, E:PAL)

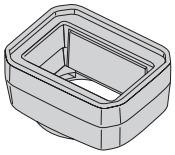
• Refer to page 5-1 for mark ⚠.

• J MODEL
付属品



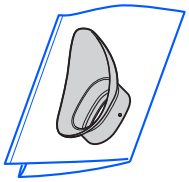
D端子A/Vケーブル
1-834-646-21

A/V接続ケーブル
1-823-156-61



レンズカバー付きフード
X-2320-850-1

ワイヤレスリモコン
(RMT-831)
1-478-495-41



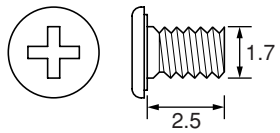
大型アイカップ
X-2342-702-1

取扱説明書
4-111-862-01 (日本語)

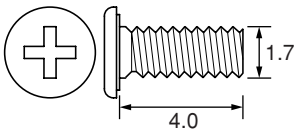
• ⚠マークについては，5-1ページを参照して下さい。

HARDWARE LIST (1/8)

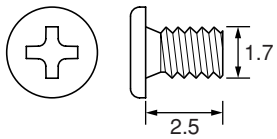
#1: M1.7 X 2.5
(Black)
2-635-562-11



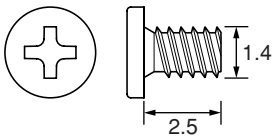
#2: M1.7 X 4.0
(Black)
2-635-562-31



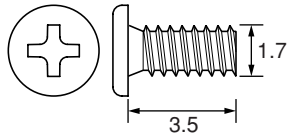
#3: M1.7 X 2.5
(Red)
2-660-401-01



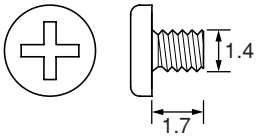
#4: M1.4 X 2.5 (Tapping)
(Dark Silver)
3-348-998-81



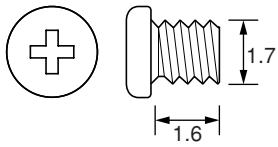
#5: M1.7 X 3.5 (Tapping)
(Black)
3-080-204-01



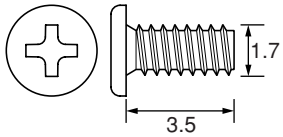
#6: M1.4 X 1.7
(Silver)
2-598-474-01



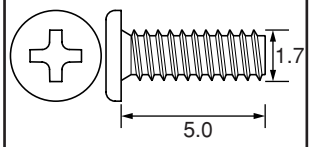
#7: M1.7 X 1.6
(Black)
7-627-552-18



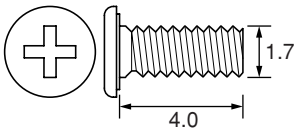
#8: M1.7 X 3.5 (Tapping)
(Silver)
3-078-890-01



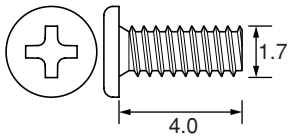
#9: M1.7 X 5.0 (Tapping)
(Silver)
3-078-890-21



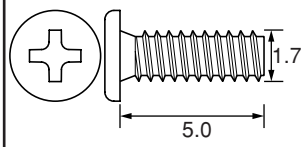
#10: M1.7 X 4.0
(Silver)
2-599-475-31



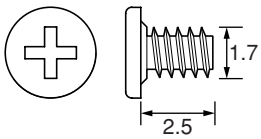
#11: M1.7 X 4.0 (Tapping)
(Silver)
3-078-890-11



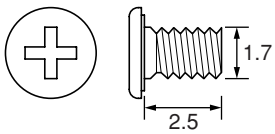
#12: M1.7 X 5.0 (Tapping)
(Black)
3-080-204-21



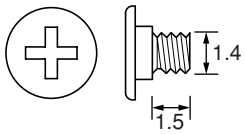
#13: M1.7 X 2.5 (Tapping)
(Silver)
3-085-397-01



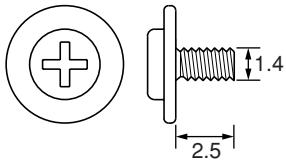
#14: M1.7 X 2.5
(Silver)
2-599-475-11



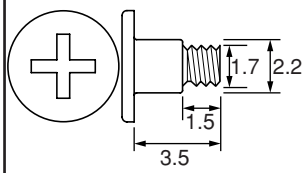
#15: M1.4 X 1.5
(Silver)
3-062-214-01



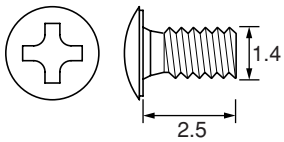
#16: M1.4 X 2.5
(Silver)
2-586-337-01



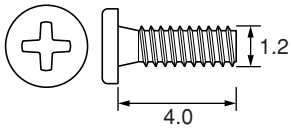
#17: M1.7 X 1.5
(Silver)
2-586-389-01



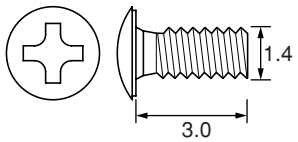
#18: M1.4 X 2.5
(Silver)
2-635-591-21



#19: M1.2 X 4.0 (Tapping)
(Red)
3-086-156-21

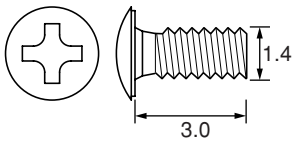


#20: M1.4 X 3.0
(Silver)
2-635-591-31

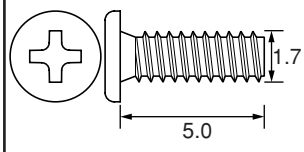


HARDWARE LIST (2/8)

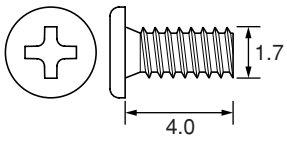
#21: M1.4 X 3.0
(Black)
2-662-396-21



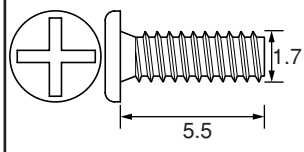
#22: M1.7 X 5.0 (Tapping)
(Silver)
3-083-261-01



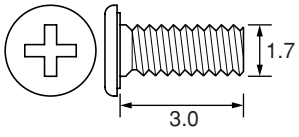
#23: M1.7 X 4.0 (Tapping)
(Black)
3-080-204-11



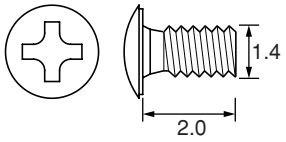
#24: B1.7 X 5.5 (Tapping)
(Black)
4-679-805-11



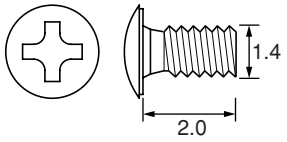
#25: M1.7 X 3.0
(Black)
2-635-562-21



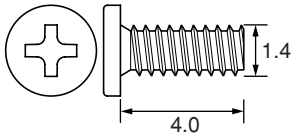
#26: M1.4 X 2.0
(Silver)
2-635-591-11



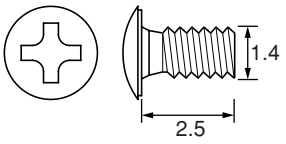
#27: M1.4 X 2.0
(Black)
2-662-396-11



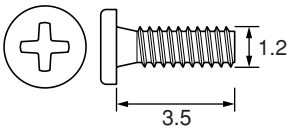
#28: M1.4 X 4.0 (Tapping)
(Silver)
3-348-998-61



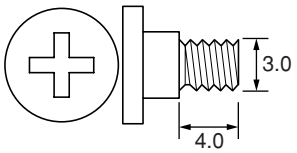
#29: M1.4 X 2.5
(Black)
2-662-396-01



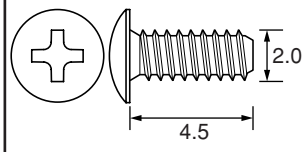
#30: M1.2 X 3.5 (Tapping)
(White)
3-086-156-11



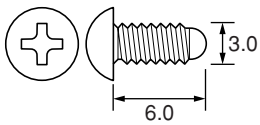
#31: M3.0 X 4.0
(Silver)
2-102-434-01



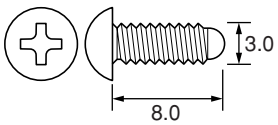
#32: M2.0 X 4.5 (Tapping)
(Silver)
2-102-498-01



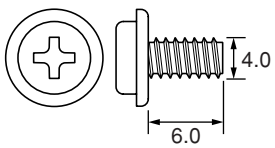
#33: M3.0 X 6.0
(Silver)
3-077-331-21



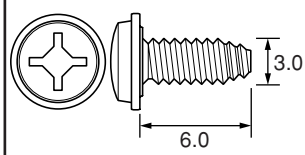
#34: M3.0 X 8.0
(Black)
3-077-331-41



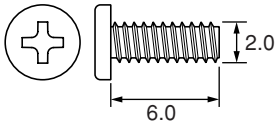
#35: M4.0 X 6.0 (Tapping)
(Silver)
3-975-291-02



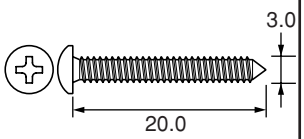
#36: M3.0 X 6.0
(Silver)
4-886-821-11



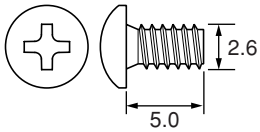
#37: M2.0 X 6.0 (Tapping)
(Black)
3-080-206-31



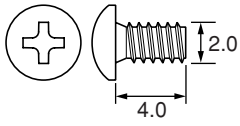
#38: M3.0 X 20.0 (Tapping)
(Silver)
7-685-651-79



#39: M2.6 X 5.0 (Tapping)
(Black)
7-685-791-09

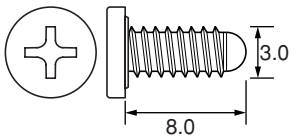


#40: M2.0 X 4.0 (Tapping)
(Silver)
7-685-851-04

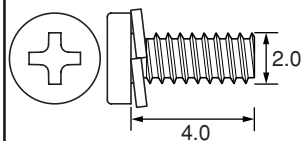


HARDWARE LIST (3/8)

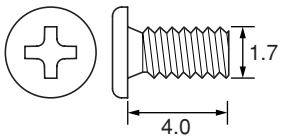
#41: M3.0 X 8.0 (Tapping)
(Silver)
3-065-748-01



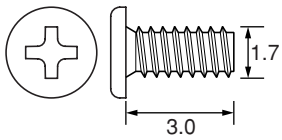
#42: M2.0 X 4.0 (Tapping)
(Silver)
7-628-253-00



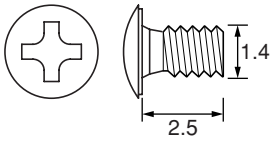
#43: M1.7 X 4.0
(Red)
2-660-401-31



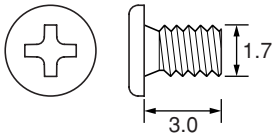
#44: M1.7 X 3.0 (Tapping)
(Silver)
3-078-890-61



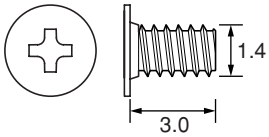
#45: M1.4 X 2.5
(Silver)
2-587-151-01



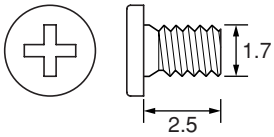
#46: M1.7 X 3.0
(Red)
2-660-401-11



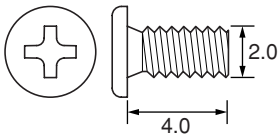
#47: M1.4 X 3.0 (Tapping)
(Silver)
2-665-774-01



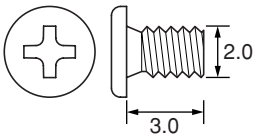
#48: M1.7 X 2.5
(Silver)
3-973-497-91



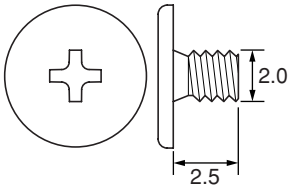
#49: M2.0 X 4.0
(Black)
2-630-005-31



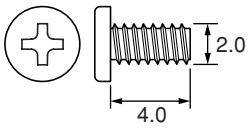
#50: M2.0 X 3.0
(Red)
2-891-494-11



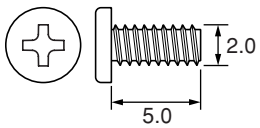
#51: M2.0 X 2.5
(Silver)
3-073-686-01



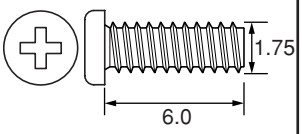
#52: M2.0 X 4.0 (Tapping)
(Black)
3-080-206-11



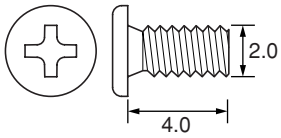
#53: M2.0 X 5.0 (Tapping)
(Black)
3-080-206-21



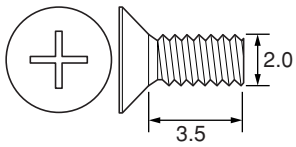
#54: M1.75 X 6.0 (Tapping)
(Black)
3-318-203-11



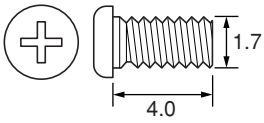
#55: M2.0 X 4.0
(Silver)
2-655-582-11



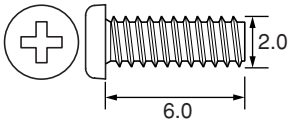
#56: M2.0 X 3.5
(Silver)
3-067-187-11



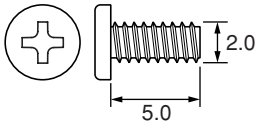
#57: M1.7 X 4.0
(Black)
7-627-852-18



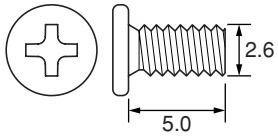
#58: M2.0 X 6.0 (Tapping)
(Silver)
3-719-408-11



#59: M2.0 X 5.0 (Tapping)
(Silver)
3-080-205-21

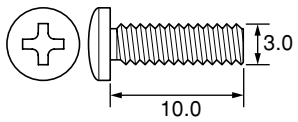


#60: M2.6 X 5.0
(Black)
3-061-062-11

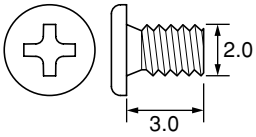


HARDWARE LIST (4/8)

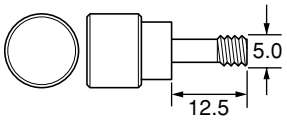
#61: M3.0 X 10.0
(Black)
7-682-549-09



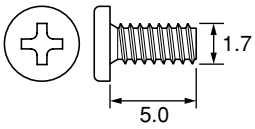
#62: M2.0 X 3.0
(Silver)
3-080-202-21



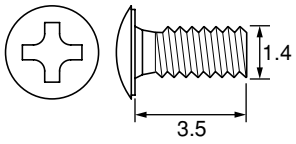
#63: M5.0 X 12.5
(Black)
3-060-811-21



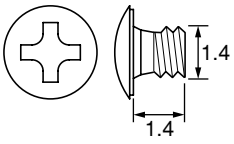
#64: M1.7 X 5.0 (Tapping)
(Silver)
2-666-551-21



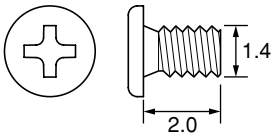
#65: M1.4 X 3.5
(Silver)
2-635-591-01



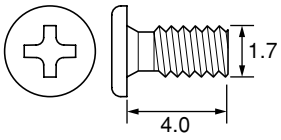
#66: M1.4 X 1.4
(Silver)
2-635-591-41



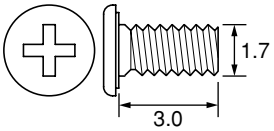
#67: M1.4 X 2.0
(Silver)
3-389-523-16



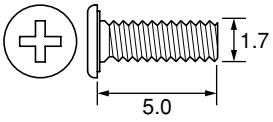
#68: M1.7 X 4.0
(Silver)
2-655-581-01



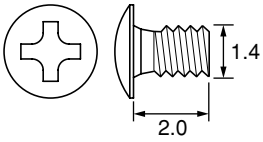
#69: M1.7 X 3.0
(Silver)
2-599-475-21



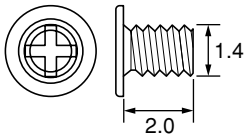
#70: M1.7 X 5.0
(Silver)
2-599-475-41



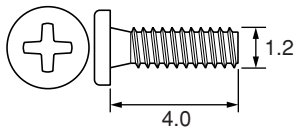
#71: M1.4 X 2.0
(Red)
3-208-537-01



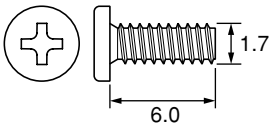
#72: M1.4 X 2.0
(Silver)
4-663-621-41



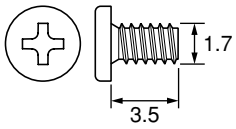
#73: M1.2 X 4.0 (Tapping)
(Black)
3-086-156-61



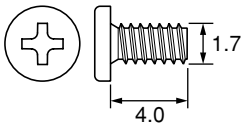
#74: M1.7 X 6.0 (Tapping)
(Silver)
2-666-551-31



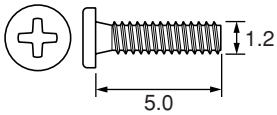
#75: M1.7 X 3.5 (Tapping)
(Silver)
2-666-551-01



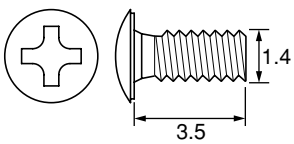
#76: M1.7 X 4.0 (Tapping)
(Silver)
2-666-551-11



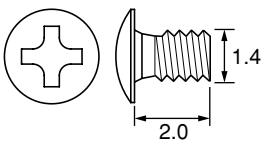
#77: M1.2 X 5.0 (Tapping)
(Silver)
3-086-156-31



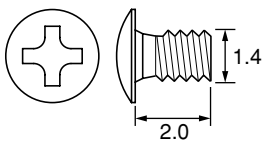
#78: M1.4 X 3.5
(Red)
3-208-537-11



#79: M1.4X 2.0
(Silver)
2-587-151-11

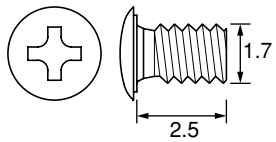


#80: M1.4X 2.0
(Black)
3-279-411-01

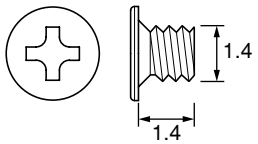


HARDWARE LIST (5/8)

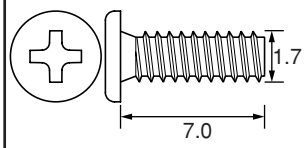
#81: M1.7 X 2.5
(Silver)
2-515-756-01



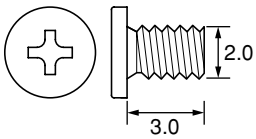
#82: M1.4 X 1.4
(Silver)
3-272-251-01



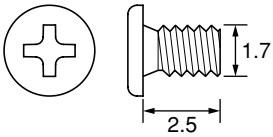
#83: M1.7 X 7.0 (Tapping)
(Black)
3-080-204-41



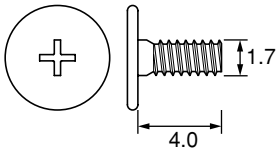
#84: M2.0 X 3.0
(Silver)
3-072-453-11



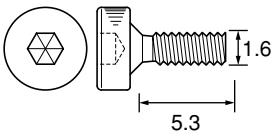
#85: M1.7 X 2.5
(Black)
2-515-483-11



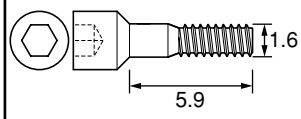
#86: M1.7 X 4.0 (Tapping)
(Silver)
2-695-434-21



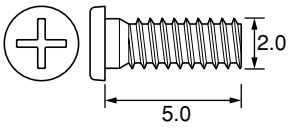
#87: M1.6 X 5.3
(Black)
2-689-328-01



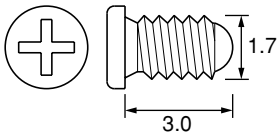
#88: M1.6 X 5.9 (Tapping)
(Silver)
2-689-015-01



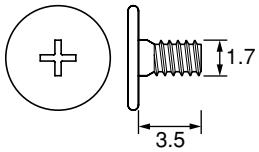
#89: M2.0 X 5.5 (Tapping)
(Silver)
2-695-575-01



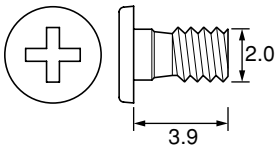
#90: M1.7 X 3.0
(Silver)
3-271-395-01



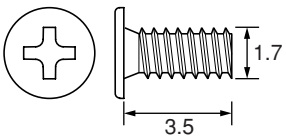
#91: M1.7 X 3.0 (Tapping)
(Silver)
2-695-434-11



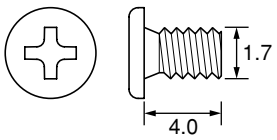
#92: M2.0 X 3.9
(Black)
3-268-954-01



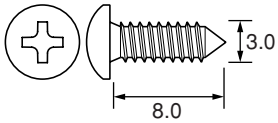
#93: M1.7 X 3.5 (Tapping)
(Silver)
3-254-082-01



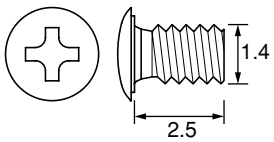
#94: M1.7 X 4.0
(Black)
2-515-483-31



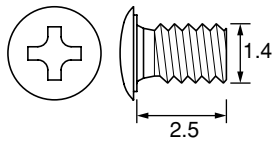
#95: M3.0 X 8.0 (Tapping)
(Black)
7-685-646-79



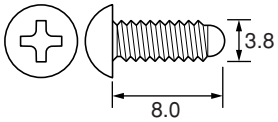
#96: M1.4 X 2.5
(Silver)
2-587-151-21



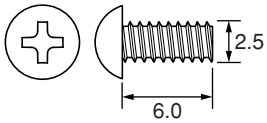
#97: M1.4 X 2.5
(Black)
2-662-396-31



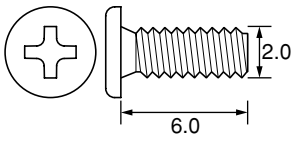
#98: M3.0 X 8.0
(Silver)
3-077-331-01



#99: M2.5 X 6.0 (Tapping)
(Silver)
3-776-750-02

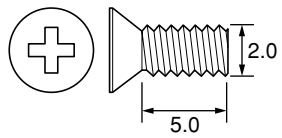


#100: M2.0 X 6.0
(Black)
3-080-203-51

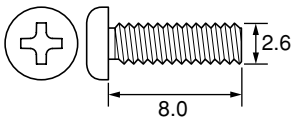


HARDWARE LIST (6/8)

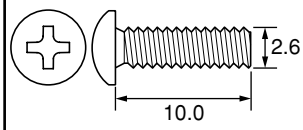
#101: M2.0 X 5.0
(Silver)
7-621-555-39



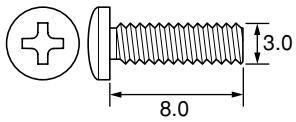
#102: M2.6 X 8.0
(Black)
7-621-284-30



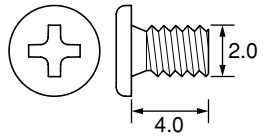
#103: M2.6 X 10.0
(Silver)
7-685-794-09



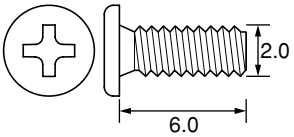
#104: M3.0 X 8.0
(Black)
7-682-548-09



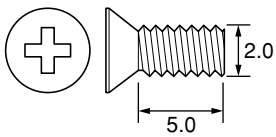
#105: M2.0 X 4.0
(Red)
2-891-494-31



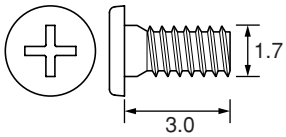
#106: M2.0 X 6.0
(Black)
3-713-786-11



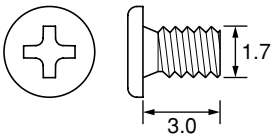
#107: M2.0 X 5.0
(Silver)
3-032-750-01



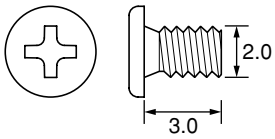
#108: M1.7 X 3.0 (Tapping)
(Black)
2-695-430-01



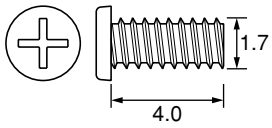
#109: M1.7 X 3.0
(Black)
2-515-483-21



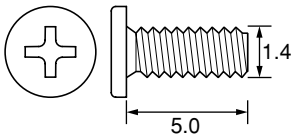
#110: M2.0 X 3.0
(Black)
2-630-005-21



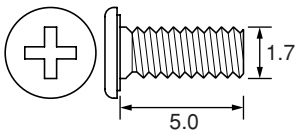
#111: M1.7 X 4.0 (Tapping)
(Black)
2-887-124-01



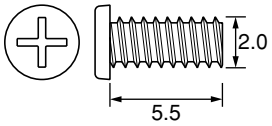
#112: M1.4 X 5.0
(Black)
2-178-410-11



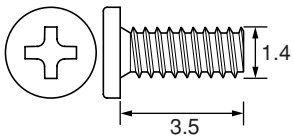
#113: M1.7 X 5.0
(Black)
2-635-562-41



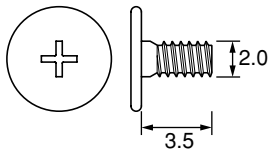
#114: M2.0 X 5.5 (Tapping)
(Silver)
2-698-464-01



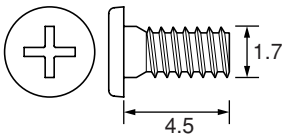
#115: M1.4 X 3.5 (Tapping)
(Silver)
3-348-998-51



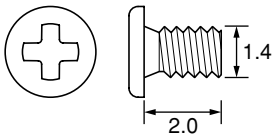
#116: M2.0 X 3.5 (Tapping)
(Silver)
2-695-435-01



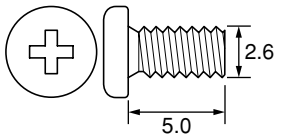
#117: M1.7 X 4.5 (Tapping)
(Silver)
2-695-429-31



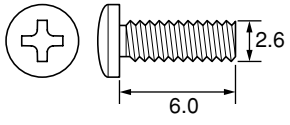
#118: M1.4 X 2.0
(Black)
2-655-580-01



#119: M2.6 X 5.0
(Black)
7-627-556-58

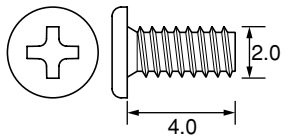


#120: M2.6 X 6.0
(Silver)
7-621-770-67

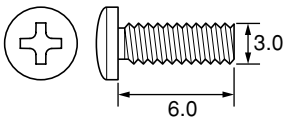


HARDWARE LIST (7/8)

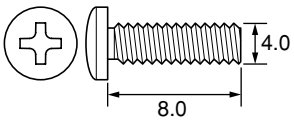
#121: M2.0 X 4.0 (Tapping)
(Silver)
3-080-205-11



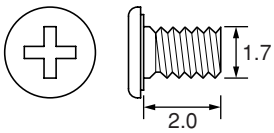
#122: M3.0 X 6.0
(Black)
7-682-547-09



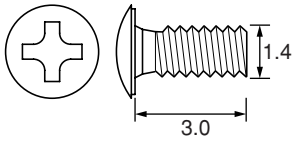
#123: M4.0 X 8.0
(Black)
7-682-561-09



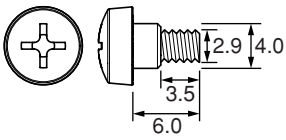
#124: M1.7 X 2.0
(Silver)
2-599-475-01



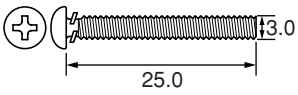
#125: M1.4 X 3.0
(Black)
3-291-847-01



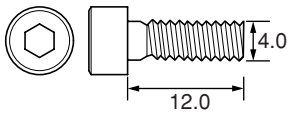
#126: M2.9 X 3.5
(Black)
3-292-616-01



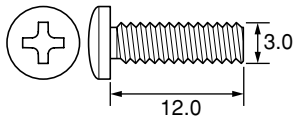
#127: M3.0 X 25.0
(Black)
7-682-654-09



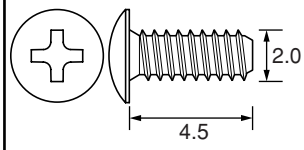
#128: M4.0 X 12.0
(Black)
3-452-472-01



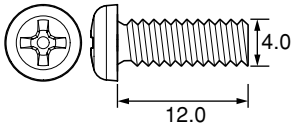
#129: M3.0 X 12.0
(Black)
7-682-550-09



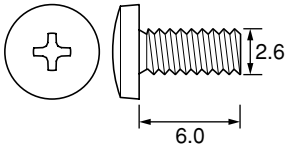
#130: M2.0 X 4.5 (Tapping)
(Silver)
3-732-817-11



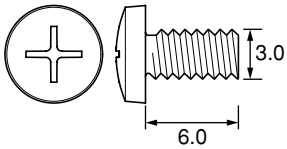
#131: M4.0 X 12.0
(Silver)
3-452-471-01



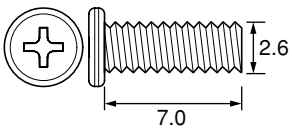
#132: M2.6 X 6.0
(Black)
4-673-655-01



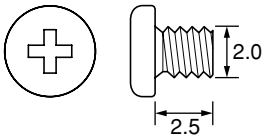
#133: M3.0 X 6.0
(Black)
3-452-484-01



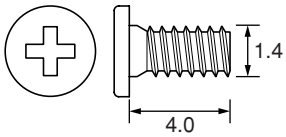
#134: M2.6 X 7.0
(Black)
3-299-572-01



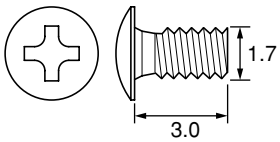
#135: M2.0 X 2.5
(Black)
7-627-553-28



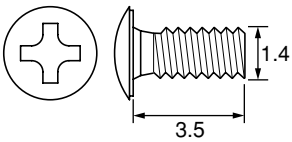
#136: M1.4 X 4.0 (Tapping)
(Black)
3-065-509-11



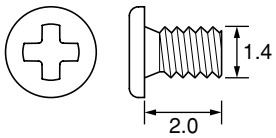
#137: M1.7 X 3.0
(Black)
3-090-976-62



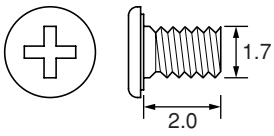
#138: M1.4 X 3.5
(Silver)
4-104-078-01



#139: M1.4 X 2.0
(Silver)
2-655-579-01

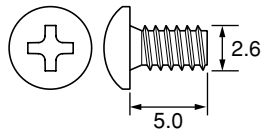


#140: M1.7 X 2.0
(Black)
2-635-562-01

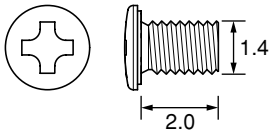


HARDWARE LIST (8/8)

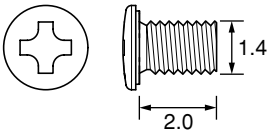
#141: M2.6 X 5.0 (Tapping)
(Silver)
7-685-791-01



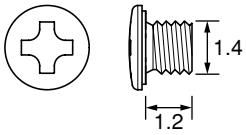
#142: M1.4 X 2.0
(Silver)
4-111-392-01



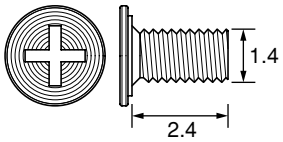
#143: M1.4 X 2.0
(Black)
4-111-392-11



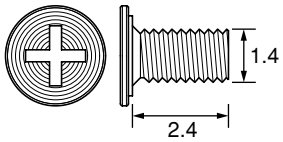
#144: M1.4 X 1.2
(Silver)
4-111-392-21



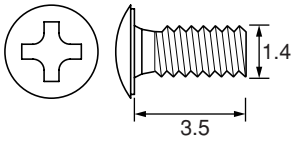
#145: M1.4 X 2.4
(Silver)
4-111-248-01



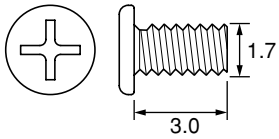
#146: M1.4 X 2.4
(Black)
4-111-248-11



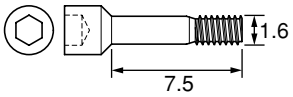
#147: M1.4 X 3.5
(Black)
2-662-396-41



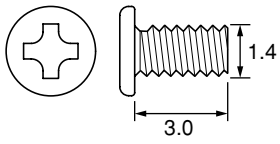
#148: M1.7 X 3.0
(Silver)
3-057-082-21



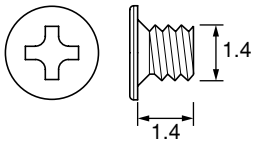
#149: M1.6 X 7.5 (Tapping)
(Silver)
4-115-505-01



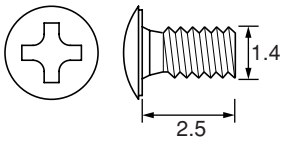
#150: M1.4 X 3.0
(Black)
4-105-150-01



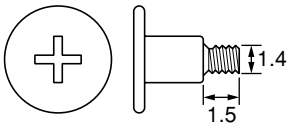
#151: M1.4 X 1.4
(Silver)
3-272-251-11



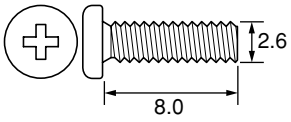
#152: M1.4 X 2.5
(Black)
4-116-473-11



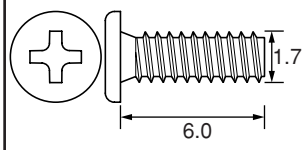
#153: M1.4 X 1.5
(Silver)
3-059-718-01



#154: M2.6 X 8.0
(Silver)
7-627-556-97



#155: M1.7 X 6.0 (Tapping)
(Black)
3-080-204-31



HDR-FX1000/FX1000E
RMT-831

SONY

LEVEL 2

SERVICE MANUAL

Ver. 1.2 2009.03

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Hong Kong Model
Chinese Model
Korea Model
Tourist Model
Japanese Model

SUPPLEMENT-1

File this supplement with the service manual.
(DI08-367)

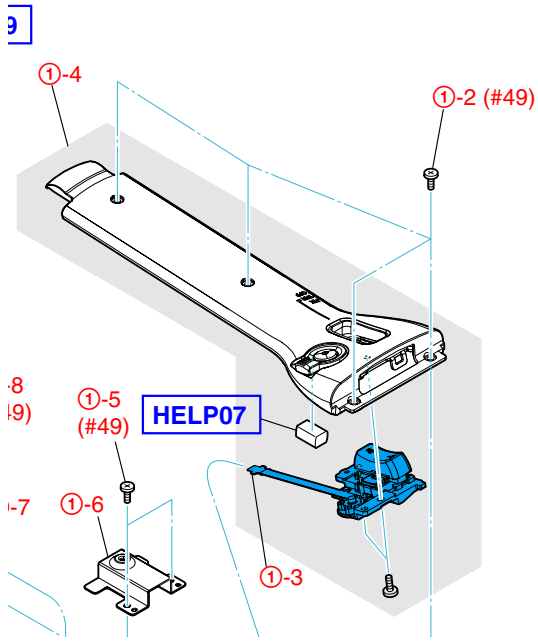
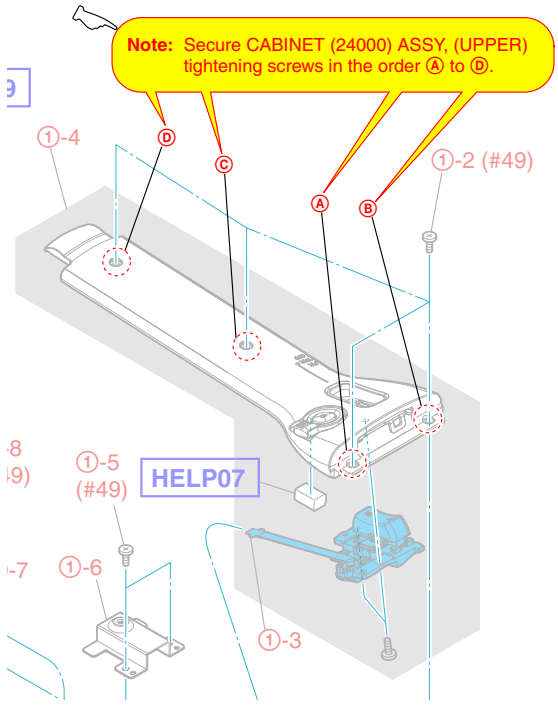
Subject:
- **Change of Disassembly**
- **Change of HELP**
- **Change of Schematic Diagrams**
- **Change of Repair Parts List**
- **Revision of Supplied Accessories**

Note: Please refer to Ver. 1.2 of SERVICE MANUAL (9-852-622-33) for the revision of supplied accessories.

2. DISASSEMBLY

2-2. DISASSEMBLY

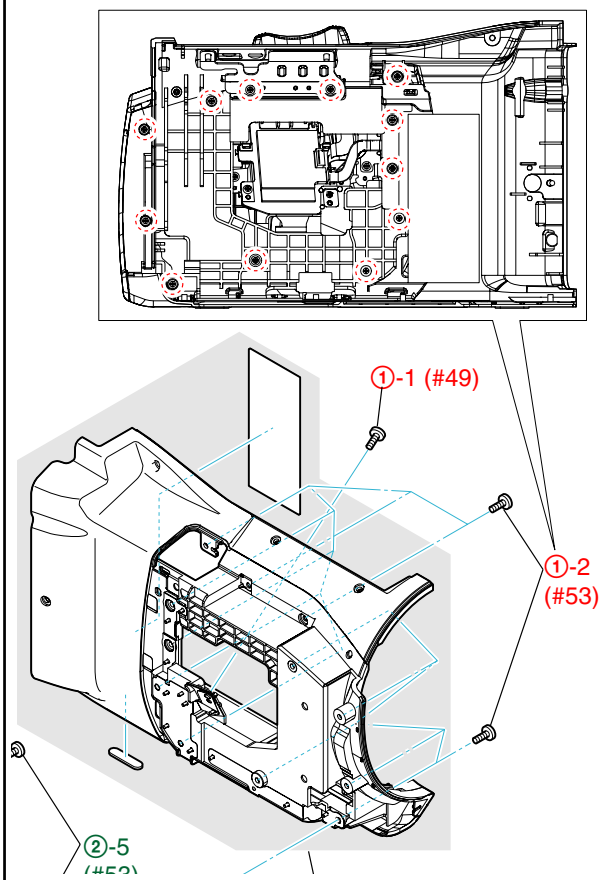
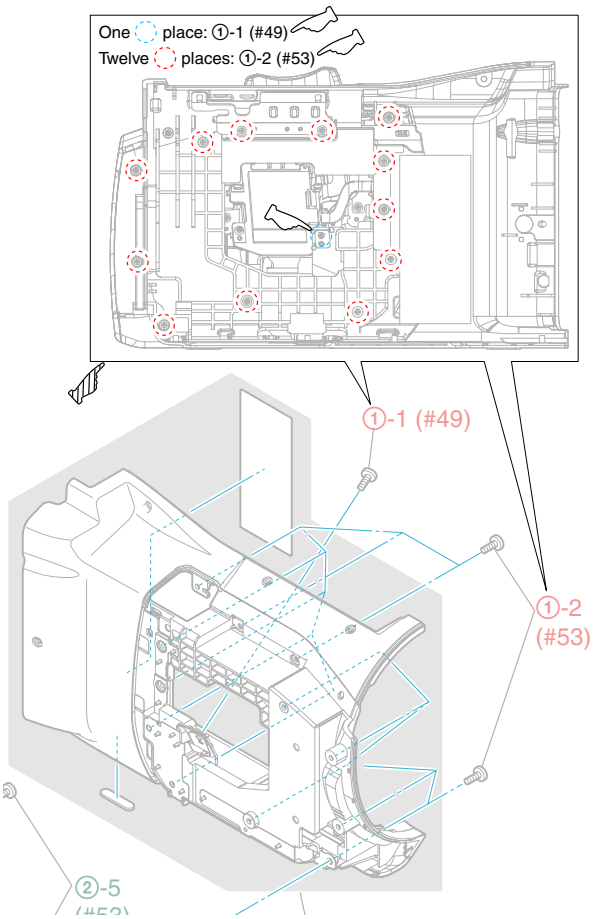
☞ : Points added portion

Page	Before change	After change
2-7	**2-2-5. HANDLE SECTON-1** 	**2-2-5. HANDLE SECTON-1** 

©2009.03

Published by Kohda TEC

☛ : Points changed portion ☞ : Points added portion

Page	Before change	After change
2-12	**2-2-10. CABINET (L) SECTION** 	**2-2-10. CABINET (L) SECTION** 

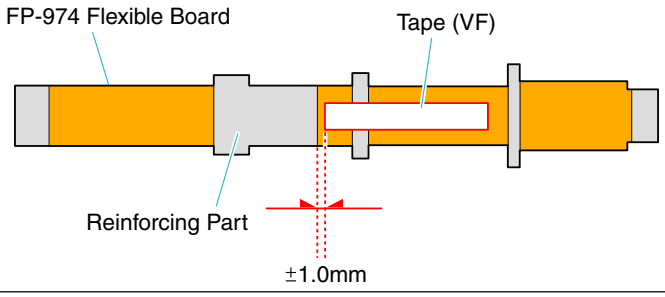
HELP

☞ : Points added portion

Before change

HELP09

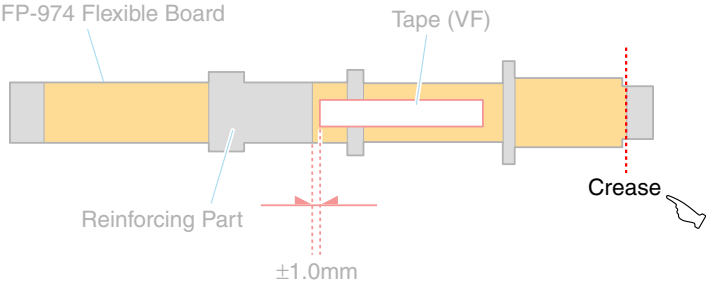
Sticking standard of the Tape (VF)



After change

HELP09

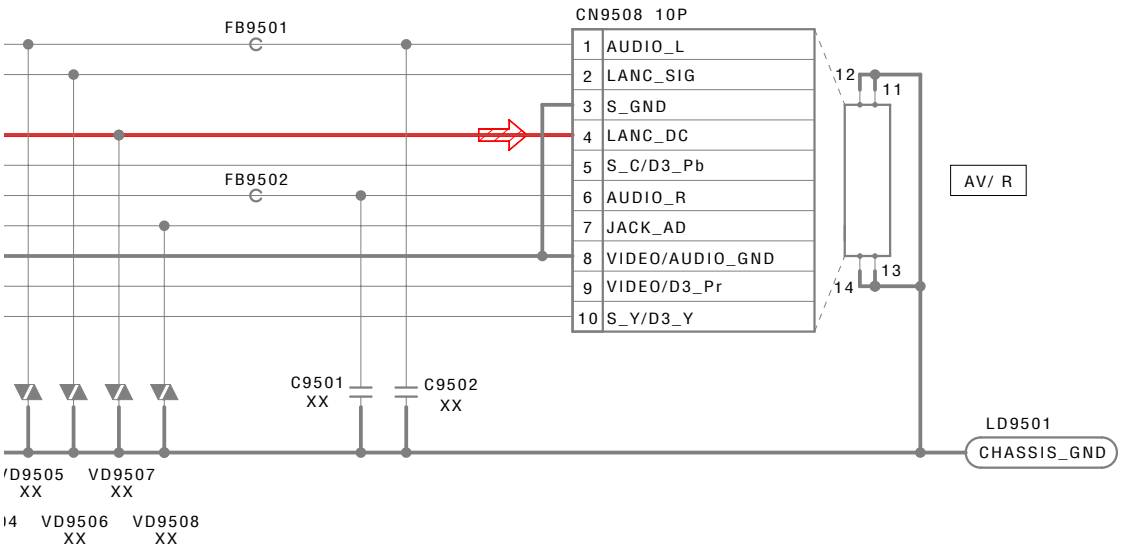
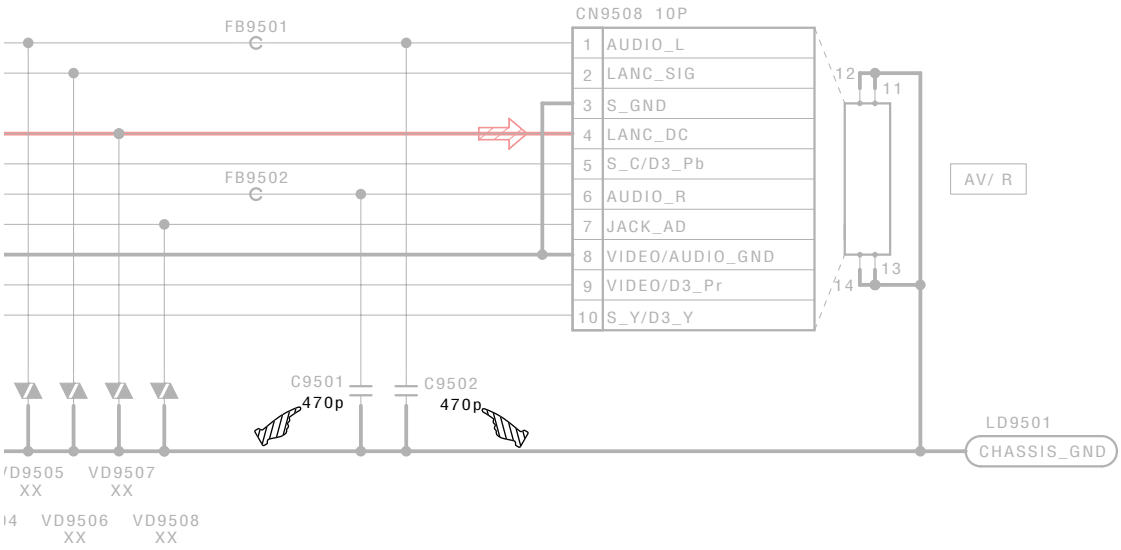
Sticking standard of the Tape (VF)



4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-2. SCHEMATIC DIAGRAMS

☛ : Points changed portion

Page	Before change
4-43	**JK-376 BOARD** (Location: C-4 to D-7) 
	After change
	JK-376 BOARD (Location: C-4 to D-7) 

5. REPAIR PARTS LIST

5-1. EXPLODED VIEWS

☛ : Points changed portion ☛ : Points deleted portion

Page	Before change	After change
5-14	**5-1-13. CABINET (L) SECTION** Ref. No. Part No. Description * 611 4-119-448-01 LABEL, FUSE REPLACEMENT CAUTION	**5-1-13. CABINET (L) SECTION** Ref. No. Part No. Description 611 4-119-448-02 LABEL, FUSE REPLACEMENT CAUTION
5-15	**5-1-14. BT PANEL SECTION** Ref. No. Part No. Description 658 X-2320-852-1 HOLDER (24000) ASSY, BT	**5-1-14. BT PANEL SECTION** Ref. No. Part No. Description 658 X-2320-852-2 HOLDER (24000) ASSY, BT

5-2. ELECTRICAL PARTS LIST

☞ : Points added portion

Page	Before change	After change
5-23	**JK-376 BOARD** Ref. No. Part No. Description ———————— — ———— ———————— — ———— ————————	**JK-376 BOARD** Ref. No. Part No. Description < CAPACITOR > C9501 1-164-935-11 CERAMIC CHIP 470PF 10% 50V C9502 1-164-935-11 CERAMIC CHIP 470PF 10% 50V

Revision History

Ver.	Date	History	Contents	S.M. Rev. issued
1.0	2008.10	Official Release	—	—
1.1	2008.11	Revised-1	• Revision of Disassembly, Block Diagrams, Frame Schematic Diagrams, Schematic Diagrams, Printed Wiring Boards, Electrical Parts List and Accessories. S.M. Revised: Page 2-3, 3-9, 3-12, 4-2, 4-44, 4-47, 4-68, 5-23, 5-42, 5-43	Yes
1.2	2009.03	Supplement-1 (DI08-367)	• Change of Disassembly • Change of HELP • Change of Schematic Diagrams • Change of Repair Parts List • Revision of Supplied Accessories S.M. Revised: Page 5-42	Yes